

**Student Disability and Employability:
Empowering Self-Discovery**

Thesis

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Abstract

University students with disabilities are supported in a variety of ways designed to help all students realise their academic potential. Students are supported whether they have physical disabilities or cognitive learning difficulties. When these students leave higher education and enter the workplace, what support can they expect? How do they understand and articulate their practical support needs to a prospective employer? Will employers be able to help? Literature suggests that relevant support for disability does exist in the workplace although perhaps not evenly. Fieldwork demonstrates that communication is the main hurdle. A model of student employability is developed that includes all students, with or without disability. The model is augmented and built into an inclusive transition framework designed to support discussion between students and support practitioners, exploring employment-related issues and concerns, and enabling a student to explore and develop their own employability and career. A prototype framework has been successfully piloted with support practitioners and with students, potentially filling the communication gap.

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Glossary

ASD	Austism Spectrum Disorder
ASET	association of student employment and work-based learning support practitioners in the UK
AT	assistive technology
DMU	De Montfort University
FOT	Faculty of Technology, De Montfort University
HE	higher education
HEA	Higher Education Academy
HEFCE	Higher Education Funding Council for England
HR	Human Resources department
IT	information technology, sometimes referred to as computing
LD	learning difficulty; learning disability; learning difference
NADP	National Association of Disability Practitioners, UK-based
NASES	National Association of Student Employment Services, UK-based
OH	Occupational Health department
SpLD	specific learning differences
supporter	also support professional; disability support officers, work- based learning or placement officers, careers advisers, mentors, employment services officers, other similar roles (job titles vary)

Chapter 1 Background

University students with disabilities, particularly those in Europe and North America, are supported in their quest for higher education, in a variety of ways designed to ‘level the playing field’ and help all students to realise their academic potential. Students are supported whether they have physical disabilities or learning difficulties. Broadly speaking, for example, learning difficulties are accommodated with minor adjustments to the teaching delivery; physical difficulties are accommodated with adjustments to buildings and classrooms. The support given to any individual student does not appear to be altered from year to year during their higher education (HE) career.

When these students leave education and enter the workplace, what support can they expect, what do they find and how will they cope? The concern arises that accommodated students are not encouraged to learn to make their own adjustments to the learning or working environments, or to find their own coping mechanisms. Having been given the right to expect such accommodations from their university experience, students may expect similar accommodations from future employers. Employers may or may not be equipped to make similar accommodations; the recruitment process may prove an insurmountable hurdle, especially for many with cognitive learning difficulties. The danger is that students and graduates may be ill-equipped to articulate their practical support needs to a potential employer, and may find themselves unable to negotiate suitable workplace accommodations.

1.1 Terminology

There are many terms in use by psychologists, researchers and student support professionals to refer to the fact that different people process information in different ways, and the accepted terminology changes over time. Thus at the beginning of the research study, a common phrase was ‘special needs’ or ‘special learning needs’. This

has been largely replaced by ‘specific learning difficulties’ (SpLD) or ‘specific learning differences’. The term ‘neurodiversity’ is also used to reflect the complexity of individuals with more than one type of learning difficulty. In this thesis, the phrases ‘specific learning differences’ and ‘SpLD’ will be used to refer to cognitive disability, where the distinction is necessary. Much of the discussion uses the more general term ‘disability’ to refer to any individual’s need for non-standard tools or approaches in order to understand and/or carry out tasks, whether the need arises from physical, cognitive, or a combination of aspects.

Students, whether on undergraduate or postgraduate taught courses, often seek subject-related employment at two main points: (1) when looking for a placement job between years, terms or semesters, and (2) when looking for a permanent job following graduation. Many final-year students put off the job search until after graduation, whilst many who look for jobs while still studying do not find one before graduation. Thus many will already be graduates when they are job-hunting. For the purposes of this thesis, the term ‘student’ will be taken to include graduates as well; when the context requires a distinction, the term ‘graduate’ will be used as necessary.

1.2 Context

The overarching research question concerned student disability and employability: in making extensive accommodations to the learning environment, were we in higher education preparing our students for the world of work or were we raising expectations the workplace cannot fulfil? The concern was triggered by the researcher’s return to computer studies teaching following an extended period working in the field, including such activities as IT graduate recruitment and technical system development. With that technical experience, the research concentrated on students within the Faculty of Technology at De Montfort University (DMU), and assumed the technical workplace as a likely place of employment.

1.3 Research effort

Fieldwork was carried out by a small research team of two academics and the faculty's disability support officer. The team was sometimes augmented by a Frontrunner student (the university's Frontrunner scheme provided paid work experience to current students during the academic year, alongside their studies, and internal to the university). As the research student, my role was Principle Investigator, choosing the research direction and activities, leading the team, and being the main point of contact internally and externally. I also managed the budget of a small grant from internal faculty research funds.

1.4 Research question development

In considering expectations and reality of support in the workplace, several questions arose, including such aspects as:

- availability of suitable accommodations in higher education;
- necessity of making suitable accommodations in the technical workplace, including legislated requirements;
- availability of suitable accommodations as adjustments in the technical workplace;
- student expectations of workplace adjustments, compared to adjustments actually available;
- employer expectations of student self-awareness, compared to how students develop that self-awareness;
- communication and collaboration between academic tutors and professional support services within the HE environment, and with potential employers at the point of transition from classroom to workplace;
- key factors that contribute to employability, indicating how ready a student or graduate is for the workplace.

The initial research aims were to investigate: the availability of special-needs accommodations in higher education, to give a baseline for student expectations; the

necessity and availability of similar accommodations in the technical workplace; and student expectations of accommodations in the workplace. An early objective was to produce a set of guidelines for employers, based in part on the university's experience of educating students with special learning needs.

Thus an exploration of the transition from university to the technical workplace was indicated, analysing the gap between expected and actual workplace support arrangements for technical students with specific learning difficulties.

As work progressed, the research question widened somewhat and the focus shifted. It was discovered that guidelines for employers seeking to make workplace accommodations already existed but were hard to find. Thus communication became part of the research aims, exploring how to disseminate both the existence of, and the routes to, suitable advice for those who need it when they need it; adjusting a workplace to accommodate a disability is not something one does every day, and when the need arises, it can be hard to know where to start. A communications framework was therefore envisaged, perhaps in the form of an information portal, to aid employers, universities and disabled students and graduates understand and address issues around employment and recruitment. There seemed to be no common language; the communication framework could usefully be accompanied by a set of models of employability and student support.

The discovery that guidelines for employers seeking to provide reasonable adjustments in the workplace already existed raised the question of evaluation of suitable accommodations. The relevant objective, therefore, turned into developing models and frameworks to help confirm the appropriateness of workplace adjustments, whether from the employers' perspective or that of the disabled employee. The anticipated outcome was a validated evaluation model that would enable employers to understand the business, as well as legal and moral, imperatives for investing in workplace support, together with a framework or tool that implements the model; this objective was

overtaken by more urgent considerations of communication, as outlined in Section 4.6 Employability model and measurement.

Fieldwork responses from employers highlighted the need for students to understand their own particular strengths and weaknesses, and to develop a sense of what they can contribute to a working team, whether of fellow students or work colleagues. The HE setting provides an opportunity for students to develop that self-awareness – arguably true for all students not just the disabled – and a further aim arose to recommend changes (developed and piloted in conjunction with campus-based support services) to the way in which educational accommodations are offered during a student's course of study, enabling them to become more self-sufficient in ways that employers might expect. An additional objective became to consider how academics and support services might evolve the support given, in order to help students to grow in confidence and independence.

The research focus to take forward concerned evolving the ways higher education, in particular DMU, supports disabled students seeking employment whether placement or permanent. Potential ways to empower students through their transition were included; central to this was a framework built around an employability model and showing relevant skill-development activities, and explicitly linked to the application/recruitment process.

1.5 Final research aims and question

The aims of the research crystallised into considering the following aspects, by exploring the literature and investigating via fieldwork:

- availability of suitable adjustments in higher education;
- necessity of making accommodations in the workplace;
- availability of suitable adjustments in the technical workplace;
- student expectations of workplace adjustments;
- lack of a common language;

- guidance for employers seeking to make suitable workplace adjustments;
- advice for students about employment-related matters;
- employability and what it means;
- consideration of evaluation of adjustments;
- measurement of employability;
- employer expectations of student self-awareness;
- evolutions to HE support for students.

These would help to answer the overarching question about helping students prepare for the world of work.

1.6 Thesis structure

This thesis describes work carried out to explore these and related questions. Chapter 2 outlines the literature considered, noting that the field is still growing.

Three research strands were followed; one about communication of disability-related employability issues, one about measurement of employability and one about evolving the way HE, and in particular De Montfort University (DMU), supports disabled students seeking employment whether placement or permanent. Several research methods were employed; Chapter 3 discusses those that worked and those that did not, and considers briefly why that was. Relevant activities and outcomes are described in Chapter 4, with some activities contributing to more than one strand.

The resultant focus combined the first and third strands, demonstrating the need to evolve HE support given to disabled students as they make the transition from classroom to workplace, with evidence building in and building on the employer perspective. Communication formed part of this evolution, aiding understanding and enabling a common language. Section 4.10 Inclusive Transition Framework proposes a practical application, in the form of a framework based on the developing employability model; the framework augments the model with checklists and suggested activities, piloted through a proof-of-concept exercise. Chapter 5 discusses the practical activity in

light of reviewed literature, and Chapter 6 concludes by considering how to take the framework forward to implementation and what it brings to the field. Several appendices provide fieldwork instrument samples; Appendix H presents the prototype transition framework developed by the research study.

Chapter 2 Literature foundation

The research question has been seen to include many facets and to suggest different avenues of enquiry. An exploration of the literature uncovered a wealth of published thinking and debate along some of those avenues. This chapter illuminates the literature foundation that emerged as the research question developed, although presented here largely grouped by topic rather than as an unfolding journey.

2.1 Disability

Disability has been defined as ‘a physical or mental impairment which has a substantial and long-term adverse effect on your ability to carry out normal activities’ (Disability Alliance, 2011; HM Government, 2010). This broad definition is used for legal purposes and hints at a diversity of impairments without naming any specifically. In reviewing employment support for disabled people, Sayce also defined disabled people as living with an impairment that has a long-term effect (Sayce, 2011) but goes further in recognising that people are ‘disabled’ by barriers to participation, as much as by any actual impairment, physical or otherwise. This social model of disability echoes an understanding of disability as a social construct, created as much by people’s perceptions and attitudes as by the sheer fact of a physical or mental difficulty (eg McMullin and Shuey, 2006) and the related observation that a difference model, in which disability is viewed as merely a way in which individuals are not the same as each other, is more helpful than a deficit or medical model, in which disability is viewed as a way in which an individual is somehow less than other people (Griffin and Pollack, 2009; Cooke, 2015). Students with disabilities are not patients, they are people too and potential colleagues (Styracula, 2003).

Cognitive difficulties are part of the mix of impairments or differences. There are various terms in use such as learning difficulties (LD), learning differences, specific

learning differences (SpLD), and neurodiversity, all referring to, for example, dyslexia, dyscalculia, Asperger Syndrome spectrum (Griffin and Pollack, 2009; Institute of Physics, 2013).

Learning disabilities, for example dyslexia, are reasonably well-understood within education and higher education (HE), although there is room for further research (Lindstrom, 2007; Ofiesh, 2007); Gregg (2007) discusses the transition between secondary and post-secondary education. There is a well-established variety of accommodations or adjustments to teaching methods (eg Griffin and Pollack, 2009; Clarkson and Esendal, 2012; Burrow et al, 2010; Institute of Physics, 2013; DMU, 2014). The intention is to enable all students to realise their academic potential; the increasing numbers of disabled students attaining university degrees attests to the success of this strategy (eg Madaus et al, 2008; Trailblazers, 2010; AGCAS Disability Task Group, 2013). The legal requirement to support people with disability is an imperative both within HE and within the workplace (HM Government, 2010; Trailblazers, 2010; Disability Alliance, 2011; Madaus et al, 2008). Within the workforce, employees can become disabled through illness or injury, and support can be necessary to help them continue to contribute to the organisation (eg McMullin and Shuey, 2006; Westmorland et al, 2005; DeLeire, 2000).

2.2 Support for disability

Disability can only be supported once the need for support has been made apparent. Hence the Equality Act (2010) requires that suitable accommodations be made only when the relevant organisation, whether in HE or an employer, has been made aware of or could reasonably be expected to realise that there is a need (Disability Alliance, 2011). But disclosure of a disability is not straightforward. In HE, disabilities and specific learning differences have been supported since the mid-90s, when the Higher Education Funding Councils for England (HEFCE) and Scotland (SHEFC) started funding support (Tinklin et al, 2004). Disclosure as a student can be beneficial, resulting in valuable accommodations such as free laptop and assistive software (Tinklin et al,

2004) and students come to understand their own needs for adjustment (Institute of Physics, 2013). Disclosure in the workplace is seen as an entirely different matter, and many individuals actively hide their disabilities for as long as possible (Styracula, 2003; Riddell et al, 2010) or perhaps do not perceive their performance issues as being due to disability (McMullin and Shuey, 2006). Further, workplace accommodations are not always requested (Witte et al, 1998), often due to the perceived stigma and image cost of doing so (Baldrige and Veiga, 2001), while many find or feel that disclosure results in rejection (Trailblazers, 2010); recent studies by Cooke (2015) and Green (2015) report that these perceptions are still widespread. Fear of rejection in recruitment is allied to the fear of discrimination in the workplace. Recognising the impact of work-based discrimination, successive governments have enacted legislation designed to combat discriminatory practices; in the UK for example the Disability Discrimination Act was enacted in 1995 and amalgamated into the Equality Act (2010) (Disability Alliance, 2011). Legislation does not change societal attitude overnight; however there does seem to be less disability-related discrimination than heretofore (eg Trailblazers, 2013; AGCAS Disability Task Group, 2013) although it can be slow to affect perception (eg Green, 2015). For the individual, then, disclosure can be a real issue; it is difficult to generalise but a positive attitude is key (Cockburn, 2011; Hagner and Cooney, 2003). Students are encouraged to be open and honest, declare their disability, and explore the various options available (Trailblazers, 2013; Graduate Prospects Ltd, 2012; Cooke, 2015). Employers, too, are becoming aware of the need to encourage openness from applicants with disability, to meet them half-way so to speak, for example by using inclusive language and demonstrating that, as employers, they are not just disability-friendly but disability-confident (Cooke, 2015).

Once a need has been disclosed, whether by student, applicant or employee, an assessment ascertains the likely impact on study, coursework and exam performance in an HE context or on job performance in the workplace (DMU, 2014; Trailblazers, 2013; HM Government, 2010; Disability Alliance, 2011; Equality Challenge Unit, 2008). Should circumstances change and worsen the impact, a reassessment should be carried out.

Disability is supported in HE in a variety of ways (eg Institute of Physics, 2013; Trailblazers, 2013; DMU, 2014; Burrow et al, 2010). For example, physical access adjustments, such as ramps, lifts and automatic doors, enable students and staff with mobility issues to get about on campus (Institute of Physics, 2013; Trailblazers, 2013). Cognitive differences are accommodated with, for example, extra time allowed on time-constrained activities that require reading questions or writing answers (Ofiesh, 2007; Lindstrom, 2007), and presentation of information in structured and visual forms such as mind maps and diagrams (Mortimore, 2003; Pavey et al, 2010); assistive technology accommodates, for example, those who struggle to read black print on white paper (Wolfe and Lee, 2007) or who need to adjust font sizes of written material (eg Tinklin et al, 2004; Griffin and Pollack, 2009; Institute of Physics, 2013; Trailblazers, 2013; Butterfield and Ramseur, 2004; DMU, 2006). Academic accommodations include presenting material in a variety of forms to appeal to a variety of learning styles (Honey and Mumford, 1992); this aids students with learning differences and can also open up a subject for all students. A mix of presentation styles includes graphical, pictorial formats such as diagrams, images, concept maps and block structures, alongside printed words and references to reality, with real examples or experience (Mortimore, 2003; Fleming and Mills, 1992; Pritchard, 2009). Accommodations, such as assistive technology, scribes and mentors, are accessed through the publicly-funded Disabled Student Allowance (DSA), following assessment of disability (eg Tinklin et al, 2004; Disability Alliance, 2011; Trailblazers, 2013).

Within the workplace, similar adjustments can be made, although providing support can be demanding (Shaw Trust, 2009). Guidance for employers does exist but can be hard to find. Larger employers tend to be more aware both of the need to reflect diversity in their workforce and of the support available to employers (Equality Challenge Unit, 2008). Clear communication of what support is currently available may be the more pressing need for small and medium enterprises (Unger and Kregel, 2003; Sayce, 2011; Baxter and Glendinning, 2011; Leko and Griffin, 2009; Hitchings et al, 2001) as well as for individuals within organisations. A variety of organisations have published

guidelines for employers wishing to understand disabilities and their implications. Guidelines are produced by not-for-profit organisations focused on disability in general, for example EmployAbility (EmployAbility, 2009), and by charities devoted to one type of disability, for example autism (National Autistic Society, 2012; National Audit Office, 2009), or one type of subject area (STEM Disability Committee, 2014). Groups of employers also work together to share good practice and provide guidance to other employers (Disability Clearkit, a set of guidelines developed by employers for employers, is but one example); this is effective because employers are more likely to be influenced by the experiences of other employers than by third parties (Diversity Milkround, 2010). Support accommodations can be found and funded through Access to Work, a government scheme designed to support disabled employees (Equality Challenge Unit, 2008; Trailblazers, 2013; Sayce, 2011; HM Government, 2015b), and other employment support agencies (Wistow and Schneider, 2007). Supporting disability includes both modifying physical access arrangements and modifying work practices (Business Link, 2012).

Employers are not the only ones who might need advice and guidance on recruitment and employment implications of disabilities, specific or general. Students and their families will also need to find support materials, and this is not always easy. The individual often needs to be proactive and seek out guidance, and to persevere until they find it (Baxter and Glendinning, 2011). The internet makes information accessible but much of it is hard to digest and understand. Indeed, internet searches do not always highlight the most useful and pertinent information: “it is disconcerting that major advocacy organisations ... were not more prominently displayed when we searched the Internet for sites on LD” (Leko and Griffin, 2009, p.84).

Accommodations have been seen to work both in HE to enable students to realise their academic potential (Griffin and Pollack, 2005; Trailblazers, 2013; Hitchings et al, 2001) and in the workplace to enable employees to be successful in their work (Hendricks, 2010; Madaus et al, 2003; Unger and Kregel, 2003; Westmorland et al, 2005). The success of support is linked to the goodness of fit between the needs and interests of the

individual on the one hand and the type of work and the actual support on the other hand (Donnelly et al. 2010); they found that informal networks are also important as part of the support, although advice from friends and family sometimes conflicts with advice from support professionals. Deveau (2011) points out the dangers of selecting workplace accommodations solely on grounds of practicality; he also reflects the social model of disability, in advising wariness about siting “the problem” in the person rather than the workplace or work practices. Although there are challenges to overcome, success can be found (Baldridge and Veiga, 2001; Madaus et al, 2008; Morningstar, 1997; Klassen et al, 2008; Sirvastava and Chamberlain, 2005; Hendricks, 2010; Schall, 2010; Hagner and Cooney, 2003). However, it is important to address the support challenges, as the lack of suitable support may make an otherwise-suitable job unsuitable for a disabled applicant (McQuaid and Lindsay, 2005).

2.3 Employability

This research defines employability as “the ability of the individual to operate effectively within their intended jobs market” (Clarkson and Esendal, 2012). In its call to the UK HE sector for information on employability support, HEFCE (2010) identifies “the capability to make a smooth transition to work” alongside “intellectual and personal development, to be effective and adaptable within a rapidly changing economy and society.” Literature confirms the multi-faceted nature of employability. For Hillage and Pollard (1998), employability is “about being capable of getting and keeping fulfilling work”, encompassing many factors. They identify four main elements including assets (skills and attitudes), deployment (career management and job search skills), presentation (for example CV writing), and context (personal circumstances and external labour market). Fugate et al (2004) focus on the personal and social aspects of employability, suggesting three dimensions: career identity, personal adaptability and social and human capital. McQuaid and Lindsay (2005), on the other hand, identify three different dimensions: individual factors, personal circumstances and external factors. Disability is mentioned by Hillage and Pollard and by McQuaid and Lindsay, as part of personal circumstances.

Personality traits and communication skills are clearly important factors in a student's employability; a study of underemployment amongst graduates highlights the importance of personal characteristics, as well as academic achievement and job characteristics (Scurry and Blenkinsopp, 2011). Adaptability is seen as a major requirement not only in general (Hillage and Pollard, 1998) but also for people with learning disabilities (McDermott et al, 1999) and for technology graduates (Marcus, 2012). Learning agility, or the ability and willingness to engage in continuous learning, particularly through on-the-job training, has been found to be a better predictor of high potential than is job performance (Dries et al, 2012). In another study, personality traits were found to influence career decisions and hence individuals' career planning abilities (Gunkel et al, 2010). Confidence in their own abilities is important for all students seeking employment, but perhaps more so for students with disability (Cockburn, 2011); disabled students are encouraged to be confident and not put up barriers for themselves.

Employability is thus seen as a multidimensional construct (Hillage and Pollard, 1998; Fugate et al, 2004; McQuaid and Lindsay, 2005; Van der Heijde and Van der Heijden, 2006). Van der Heijde and Van der Heijden differ from other authors by focusing on a competence-based approach to understanding employability, emphasising the individual's capabilities rather than acquired skills.

Some elements of employability seem straightforward and can be learned, for example technical skills for a particular type of work, perhaps related to an individual's field of study or degree course, or job application skills such as interview technique (eg Hind and Moss, 2011). Other elements are less straightforward, for example work ethic, adaptability, self-determination. Work ethic is a complex construct in its own right (Pogson et al, 2003; Miller et al, 2002); Pogson et al argue that the career stage should be taken into account, and students and recent graduates can be seen to fall into the initial or "trial" career stage. However, care is needed to remember the context or background of the individual; for example, work ethic is not equally relevant to all

students from all backgrounds (Bhagat, 1979). Academic ethic is similar to work ethic, and hard work has been seen as insufficient on its own to ensure good grades (Rau and Durand, 2000); academic discipline is both learned and a strong predictor of (academic) success. Adaptability, too, is an important element of employability. Whether it is called personal adaptability (Fugate et al, 2004), adaptability and critical thinking required for technical roles (Marcus, 2012), or learning agility (Dries et al, 2012), adaptability can be seen as an indicator of high career potential.

Self-determination consists of self-awareness with a drive to succeed or self-motivation; educators therefore need to give students an opportunity to develop career maturity (Morningstar, 1997). Attitudinal barriers to study and employment opportunity do exist, and confidence is key to success (Cockburn, 2011). In studying attributes of job satisfaction among graduates with LD, Madaus et al (2003) found that self-regulatory strategies and employment self-efficacy predicted job satisfaction, even more than demographic or work-related factors. When studying adults in the workplace, Madaus and a different team found that self-determination is key and must be fostered in students with LD (Madaus et al, 2008). Self-determination also extends to students finding their own ways to work with their differences; quotes from students and workers alike show that many of them will do in their careers what worked in their studies to ensure their own success (Hitchings et al, 2001; Institute of Physics, 2013; National Autistic Society, 2012).

2.4 Recruitment

Students and graduates with disabilities are part of the talent pool of employable people. They want to work, they seek employment (Trailblazers, 2010); they have aspirations and dreams just as do their non-disabled peers (Morningstar, 1997; Graduate Recruitment Bureau, 2009). Employers are doing themselves a disservice if they overlook this part of the potential workforce (Shaw Trust, 2009; Graduate Recruitment Bureau, 2009; Wistow and Schneider, 2007), quite apart from the need to meet legal

requirements (Trailblazers, 2010; Disability Alliance, 2011; Madaus et al, 2008). But despite the mandate for employers to provide equal opportunities to people with and without disability, there does seem to be a gap in employment provisions. Not all employers who say they would attract or hire disabled graduates actually do (Equality Challenge Unit, 2008; Shaw Trust, 2009). Recruiting graduates is challenging at the best of times, and recruiting disabled graduates provides complexity of a different nature (My Plus Consulting, 2012). There is guidance and some support available for employers seeking to attract or recruit disabled applicants, for example the Positive About Disabled People Two-Tick scheme (Trailblazers, 2013; HM Government, 2015b), and for applicants, for example the Access to Work programme (Equality Challenge Unit, 2008; Trailblazers, 2013; HM Government, 2015a). Disabled students do get employment but disability seems to affect starting salaries and the prospect of getting a job at all, although perhaps not as much in recent years as had been the case earlier (AGCAS Disabilities Task Group, 2010 – 2013). It is apparent that employment rates do depend on the disability (Shaw Trust, 2011; Riddell et al, 2010); for example, dyslexia employment rates are close to non-disabled rates while mobility and mental health employment rates are much lower (AGCAS Disability Task Group, 2010).

From the students' perspective, it is harder for a disabled applicant to get a job than for a non-disabled one, partly because of the recruitment process and partly because of employer misconceptions about disabled people (Trailblazers, 2010), or perhaps student assumptions of employer misconceptions (prospects.ac.uk/forum, 2010; Trailblazers, 2010; Green, 2015; My Plus Consulting, 2012). One study found that disabled students and graduates were more likely to apply to employers who were seen to give opportunity to explain disability and other mitigating circumstances, and who were willing to discuss ways to enable full participation (Cooke, 2015). A related source demonstrated that some employers were becoming more disability-friendly (My Plus Consulting, 2012). The Positive About Disabled People scheme allows employers to display the Two-Ticks symbol in their job advertisements and other published material if they sign up to five commitments addressing potential issues in recruitment, discussion of support requirements, and putting in place required workplace adjustments

(HM Government, 2015b). The scheme was design to demonstrate to applicants that the employer is aware of disability and strives to meet the needs of disabled applicants. In practice, however, implementation of the scheme has been found to be imperfect, with patchy adherence to the five commitments, and the suspicion that employers use the symbol more to manage applicant impressions than to make a real difference in the workplace (Bacon and Hoque, 2012; Cottell, 2014).

Several organisations collate advice and provide support to disabled student and graduate job-seekers, whether for placement or permanent jobs (Shaw Trust, 2009; EmployAbility, 2009; Graduate Prospects Ltd, 2012; Trailblazers, 2010; Trailblazers, 2013; Diversity Milkround, 2010; My Plus Consulting Ltd, 2015). Overall however, it must be noted that getting a graduate-level job is neither easy nor guaranteed for any graduate, disabled or not (Scurry and Blenkinsopp, 2011). Many people choose to go independent and set up their own businesses, and disabled entrepreneurs can be successful in this endeavour (Bridge, 2012; Trailblazers, 2010).

2.5 Employability models

The elements of employability seen earlier in Section 2.3 Employability have been grouped into models in various ways, summarised in Table 2.1. Hillage and Pollard

authors	format	purpose	year
Hillage and Pollard	4 columns	policy analysis	1998
Fugate et al	3 columns	supporting career change	2004
McQuaid and Lindsay	3-element diagram	supporting career change	2005
Van der Heijde and Van der Heijden	5 lists	supporting employees	2006
Hind and Moss	book chapters	student skill development	2011

Table 2.1 Employability model comparison

(1998) propose a four-column model used to drive policy analysis; Fugate et al (2004) propose a three-column model, while McQuaid and Lindsay (2005) propose a three-element model expressed as a Venn diagram highlighting the overlap between elements. Van der Heijde and Van der Heijden (2006) group employability competences into five dimensions, expressed as a list of concepts. In their handbook for students, Hind and Moss (2011) present employability skills not as a model but as a collection of skills to develop, each explained in a separate chapter. Most of these models are expressed in lists of words or columns of text, facilitating comparison of employability elements and gathering the concepts and explanations on the printed page.

Disability is embedded in the “personal circumstances” elements found in many of these models, rather than identified as an element in its own right. This allows any individual to see the bigger picture of employability, but not to address any impact of their disability on their employability.

2.6 Measurement

There have been several attempts to measure employability as a general concept. Hillage and Pollard (1998) report a number of attempts to measure individual employability, using instruments of varying sophistication; they conclude that “it looks difficult to create a fully comprehensive set of indicators” (p.35). Rothwell proposes an instrument that incorporates both internal factors and external factors, in measuring students’ self-perceived employability (Rothwell and Arnold, 2007; Rothwell et al, 2008; Rothwell et al, 2009). Although this instrument looks at current perceptions and attitudes, it would not lend itself to helping students understand what they need to develop for themselves. Van der Heijde and Van der Heijden (2006), recognising that employability is multi-dimensional, propose a measure based on several competences. Their validated instrument consists of 47 questions across five competences, and is relevant in employment settings both for organisational workforce planning and development, and for individual career development.

Measuring single elements of employability has also attracted much research attention and generated a range of approaches. For example, on measuring work ethic, methods range from a 65-item inventory (Miller et al, 2002) to a single-question indicator (Williams, 2007). Perseverance and passion, or grit, has been measured in an 8-point scale (Duckworth and Quinn, 2009).

Few of these measures address disability directly. One exception proposes a list of interview questions to measure the impact of disability on future career choices (Hitchings et al, 2001). Riddell et al (2010) recognise that severity of disability will have an impact but make no attempt to measure it. McMullin and Shuey (2006) attempt to analyse the impact of disability severity among other factors.

A cautionary note is also sounded, not to rely solely on measures, whether by rating scales or psychometrics, as these only present part of the picture and must be balanced with other types of observation (Meservy, 2011; Miller et al, 2002), such as observations of behaviour or attitude (for example clinical or occupational health observations), and the context of the work performance (for example attitudes, needs, personality).

2.7 Transition from student to worker

The focus on employability seen in HE (HEFCE, 2012; HEA, 2012; DMU, 2015; Hind and Moss, 2011) implies that tertiary education provides a transition platform in which a student grows into a professional worker. For students with disability of any kind, this transition platform includes, or should include, developing self-awareness and self-determination skills; sensitivity to the many complex issues is needed (Madaus et al, 2008). Students can be guided as they learn what practical adjustments work for them in HE and project that into their possible career work (Institute of Physics, 2013). What works initially may not be appropriate in the long term, therefore suitable adjustments may need to evolve; for example adults on the Asperger Syndrome spectrum need intensive on-the-job training that can ease off as familiarity grows (Hendricks, 2010). At

the same time, for some intellectual disabilities, support needs to be consistent as far as possible and to include the individual's informal networks such as family members (Donnelly et al, 2010). Different approaches will fit different cases, and should take into account individual self-development as much as changes in the workplace (Hagner and Cooney, 2003).

Students should be given the chance to develop their own skills in career development, monitoring and decision-making (Hitchings et al, 2001; Morningstar, 1997) and to improve their self-confidence (Klassen et al, 2008). Indeed, employability skills can be taught as part of a degree programme (Hind et al, 2007) or learned by the student on an individual basis (Hind and Moss, 2011). It is important to remember that a student's employability is not static but will develop over time. At the same time, it is important to help students manage their expectations and aspirations, and to keep their expectations realistic (Scurry and Blenkinsopp, 2011). For some students, however, just completing their degree course can be a major challenge (Rothwell et al, 2008). It may be that students with severe and/or multiple disabilities need to concentrate all their efforts on their studies rather than simultaneously seek employment, or it may be that they are just not ready to take employment advice on board (Equality Challenge Unit, 2008; Morningstar, 1997; Cockburn, 2011).

In supporting students through the transition to career success, the various support professionals in HE have important roles to play: for example, individual personal mentors (Grove and Giraud-Saunders, 2003) and the student's personal network of friends and colleagues (Donnelly et al, 2010). Teaching staff, whether academics or support professionals, need to learn how to support students with, for example, learning differences to develop their career skills (Neubert et al, 2002). Continuous professional development helps all supporters keep up to date in their own areas and become aware of developments in other areas; links between support and academic departments need to be strong to ensure that support is not fragmented (Equality Challenge Unit, 2008). However there was scope for further investigation. In discussing current research on neurodiversity, the observation was made that there was work being done in the

transition area for disabled students, both practical work and research, but not much, mostly by specific disorder support bodies (for example National Autistic Society), and in an isolated and uncoordinated fashion (unatt., 2014).

2.8 Conclusion

Student disability and employability were found to be multi-faceted, with literature covering specific areas. Questions remained, however, in the conjunction of applicants from HE who happened to have disabilities, on the one hand, with employers with entry-level job opportunities, on the other hand. What practical support were students expecting in the workplace, what practical support were employers able to provide, how did a discussion of the needs for workplace adjustments arise? Did the practical support provided in the workplace actually help people to do their jobs effectively? Was information about disability really a well-kept secret, how was it sought and where was it found? Were students able to see disability as only one aspect of their overall employability? Research activity explored these questions.

Chapter 3 Research methods

This research into student disability and employability explored several issues in the realms of higher education and of the workplace, in particular (but not exclusively) graduate-level technical jobs, and examined aspects of the bridge between the two realms. Each student makes a transition from being a relatively dependent learner to becoming a largely independent worker, although this transition does not necessarily occur at the same point for each individual. The bridge includes recruitment and job application activities, from several perspectives:

- student/graduate
- lecturer/tutor
- support professional
- employer.

Aspects to be explored centred around communication, barriers to recruitment, and employability-enhancing activities.

Thus the research questions sought data on perceptions and attitudes, what drives those perceptions, and how the attitudes and hence employability activities might be influenced during a student's HE career. It also sought data on how widespread the perceptions might be and how susceptible they are to change through increasing awareness and self-awareness. There was a need to be sensitive throughout the research, as disability is a sensitive area and a protected characteristic under the Equality Act (2010) (HM Government, 2010). There was a need to avoid contaminating staff-student relationships between research team members and their students. There was a need to obtain informed consent from all relevant parties such as students and their employers. At the same time, there was a need to confront issues in a matter-of-fact way and not shy away just because of the sensitivity. In designing research activity, ethical considerations were taken into account throughout (Denscombe, 2010b; Oates, 2006) and relevant sets of ethical guidelines were consulted, notably SRA Ethical Guidelines (SRA, 2003), British Sociological Association (BSA, 2002) and British Psychological

Society (BPS, 2009) guidelines, and BCS Code of Conduct (BCS, 2011); BCS is the Chartered Institute for IT, and is relevant within the computing subject area. All of these reflected the need for the researcher to remain detached from participants, to ensure none is adversely affected by taking part in the research, and to recognise and honour researchers' obligations to their subjects; in short, a professional approach to research (Denscombe, 2010b). Ethical approval was obtained from DMU Faculty of Technology Human Research Ethics Committee in September 2012.

3.1 Research methodology

Research methodologies include quantitative and qualitative paradigms. Quantitative approaches tend to assume the existence of an underlying reality to be discovered, whereas qualitative approaches do not assume this (Flick, 2007). Thus quantitative methods focus on data in the form of numbers, measuring or counting responses or observations (eg Oates, 2006; Denscombe, 2010a). Statistical analysis of validity and reliability are sought, which can be used to test the quality of research instruments, for example surveys by questionnaire. There is often an implication of large numbers of responses, and the use of numerical analysis techniques. Qualitative paradigms, on the other hand, understand that people's perceptions are not so easy to pin down, and do not lend themselves to neat categorisation or measurement. Responses are expressed as words, text or images, encapsulating ideas and meaning, and requiring description as much as analysis of text (eg Denscombe, 2010b).

Research paradigms that investigate phenomena in the world of people and their endeavours are commonly identified as interpretivist or constructivist (Oates, 2006; Denscombe 2010a; Flick, 2007). An interpretivist approach recognises that phenomena being studied must be interpreted within the context surrounding the person and their actions, decisions and approaches (Oates, 2006; Flick, 2007). The interpretations are constructed and operate at an individual level, in which for example the individual participant has made sense of their circumstances within the context of their immediate

surroundings. This sense-making is their own interpretation of where they fit in the world (Thompson, 1988; Cooper, 2001). For the researcher, interpretation comes into play in several areas, including their identification of an interesting phenomenon to be studied, and including the consciousness of their own part in research fieldwork encounters (Gillham, 2005), as well as the interpretation of results and what they mean within the context of study (Gilbert, 2001). A constructivist approach also assumes that what is being studied is an interpretation of the reality for that individual (Flick, 2007). Reality is understood by building or constructing an interpretation (Gibbs, 2007), based on many observations over time (for an individual) or by consensus (among a group of people); thus, for example, disability is seen as a social construct, or work ethic arises as a complex construct. For the researcher, construction is a deliberate action (Flick, 2007). Observations, which may or may not be recognised as interpretations, are analysed, grouped into building blocks or hypotheses, and combined to see what seems to fit together and what does not (Corbin and Strauss, 2008; Gilbert, 2001). The constructions that arise can change over time (Cooper, 2001), with a change of perspective or by evolving societal dynamics for example (Gillham, 2005; Flick, 2007; Gibbs, 2007).

Qualitative research studies what happens in the world rather than in a laboratory. At the same time, it tries to understand people's experiences, interactions, thinking and decisions from the person's perspective, 'from the inside' as it were (Flick, 2007). Its empirical data comes in the form of text expressing people's views and attitudes as much as by description of activities, their consequences and what people learn as a result (Denscombe, 2010a; Flick, 2007). This research study, based on stakeholder attitudes, expectations and experiences, clearly lent itself to a qualitative approach, largely in an interpretivist way. On philosophical grounds, the research sought stakeholder perceptions rather than counts of categorised characteristics, for example, and participants needed the freedom to express their views. On practical grounds, although it appeared at the outset that sufficient participant numbers might yield analysable statistics, most fieldwork exercises attracted small numbers of responses, precluding the validity of statistical analysis. The stakeholders in question for this research were students, employers, academic tutors and professional support staff.

This research study was carried out in one HE institution, with small numbers of participants, exploring aspects of the transition to work for individuals who might find the transition problematic for one reason or another. The HE sector is itself a diverse collection of institutions, and other disabled student populations, and their support professionals, operate within different contexts. The study was not seeking universality, rather it sought to illuminate problematic parts of the transition, and to understand what made them difficult and what could be done about it. The study findings were expected to be indicative of similar problems and possible interventions that might also apply elsewhere, rather than representative of disabled student populations throughout the HE sector. Furthermore, this research could not give advice without knowing the relevant context. Rather, the study could highlight what might be relevant elsewhere. Findings might echo aspects of supporting students' transition to work from other institutions; resonance was more pertinent than recommendations.

3.2 Research methods used

This research was exploring what seemed like uncharted territory, with no predetermined map of effective methods to be used, so the research approach and methods had to emerge and evolve. Concepts and principles from action research were used for fieldwork and conference attendance, chiefly cyclic reflection. Concepts and principles from grounded theory were used for analysis of findings, chiefly thematic analysis.

With the researcher actively taking part in the activity being studied, **action research** usually consists of cycles in which an activity is carried out and evaluated to consider what went well and what didn't, from which changes are implemented and the cycle begins again. Here, action research was used not so much in the sense of making a change and seeing what effect it had, but in the sense of cycles of reflection, driving the direction of research activity (Denscombe, 2010a). Action research was also relevant

when developing and trialling the transition framework, in the sense of evolving the framework between pilot exercises.

Looking back, it can be seen that cycles of iteration centred around data gathering and around model building, with a third smaller cycle around the prototype transition framework emerging from the model. In the data gathering cycle, fieldwork gathered information, opinions and perspectives from students on campus and on placement, with survey attempts by questionnaire and by interview. Findings and lessons learned from each survey attempt drove improvements for the next attempt. Fieldwork interviews with placement employers were more successful, requiring fewer iterations; responses to early interviews did generate adjustments to later interview question sets. Findings from fieldwork were then built into the employability models that were emerging from attempts to depict the various aspects of student employability, particularly from the perspective of disabled students. Hence the cycle around model building included presenting evolutions of the model to relevant experts at successive conference workshops, and noting their comments and perspective. Bringing the two cycles together, and reflecting on the model in light of both fieldwork and the desire to create some mechanism to help students seeking to improve their own employability, the third cycle began with turning the models into a prototype framework intended to help student support professionals provide advice to students in such a way that the student could become self-supporting. In this third cycle, a short pilot exercise demonstrated the need for such a tool, the development of which is further work beyond this thesis.

Grounded theory explores an area or domain, typically by gathering participant views, opinions and observations. Data gathering sometimes consists of in-depth interview and/or observation of one or more participants as case studies, who may be perceived as typical of some group of interest to the study. In other studies, a larger number of participants may be interviewed for example. Fieldwork design does not necessarily have a prior understanding of the theory behind the research question; rather, data from the social field is analysed for topics that emerge as themes, cropping up from several participants or several times by the same participant (Corbin and Strauss, 2008;

Denscombe, 2010a). Themes and topics are combined to yield theories explaining the phenomena of study, building theory from the ground up as it were, based on the plurality of participant responses. With this research study starting with a set of topics to explore, grounded theory has not been used in its usual form. Rather, the concept of emerging themes has informed the research, finding common themes among the various perspectives gleaned during fieldwork interviews, and thereby highlighting what is important to the various stakeholder groups.

Qualitative data gathering techniques in use included fieldwork by questionnaire and by semi-structured interview. The disabled student population being studied comprised all students on Faculty of Technology disability register at De Montfort University, over several academic years. The disability register collates students who have disclosed a disability or learning difference, together with their recommended adjustments; academic tutors refer to the adjustments in designing teaching and assessment provision. Students were invited by the faculty's Disability Coordinator to take part in questionnaire fieldwork. Questionnaire response rates were very low, although some students in the target population were interviewed; the number of student participants was therefore small and expected trends could not be analysed. The framework under development was piloted by students who may or may not have been disabled, using a set of open questions following a short hands-on demonstration session. Support professional and academic tutor insights were gathered on flipcharts in the course of conference workshops, although they were not a formal part of the research population. The employer perspective was gathered by semi-structured interview primarily of line managers in organisations which hire Technology students for their placement year, drawn from public, private and charity sectors. Fieldwork design followed ethical guidelines, in particular those of the British Psychological Society (BPS, 2009), and the need for sensitivity when discussing disability of any kind (Pavey et al, 2010; Madaus et al, 2008; Equality Challenge Unit, 2008; Morningstar, 1997).

Informed consent is relevant in fieldwork, whether by questionnaire (Denscombe, 2010b) or by interview (Gillham, 2005), and was built into all fieldwork undertaken.

Informed consent was obtained from each participant, as appropriate. For each study, a briefing sheet was written, setting out the purpose and nature of the research and what was being asked of the participant, as well as practical issues such as how data would be collected, processed and stored. Briefing sheets confirmed the voluntary nature of the research and allowed the participant to withdraw from the research at any time. In student fieldwork, briefing sheets explicitly addressed the nature of the student-tutor relationship, clarifying that participation would have no impact on any pre-existing working relationships, nor on academic results. Consent forms confirmed agreement to participate, and allowed the possibility of follow-up interviews should the research study wish to explore responses further. For those interviews that were recorded, the consent form explicitly agreed to the interview being recorded, and the recorded interviews repeated the consent at the start of each interview. Sometimes informed consent gets in the way: one data gathering exercise, as described in the next chapter in Section 4.2 Student fieldwork attempts, attempted to contact students on placement and their supervisors; when it came to obtaining consent, student consent had to be obtained in order to seek supervisor consent (in order to avoid inadvertently disclosing an undisclosed disability), but supervisor consent had to be obtained before approaching the student employee (as fieldwork participation could be seen as interrupting the flow of their work). The deadlock this produced prevented the data gathering.

Construction of fieldwork instruments includes creating questions that will gain relevant perspectives, piloting and trialling the questions and instruments, and making any relevant changes (Gillham, 2005; Denscombe, 2010a). Questions were designed to elicit views pertinent to one or other of the research questions, ensuring that the research team knew what each answer would contribute. Fieldwork instruments, whether questionnaire or interview question list, were piloted and trialled with the faculty Disability Coordinator and, where relevant, with students or employers as members of the target population. Although time consuming, the trialling exercises proved invaluable in all cases. Accepted practice in questionnaire administration (Denscombe, 2010a) and interview practicalities (Gillham, 2005; Thompson, 2000) were followed. Participant contact details and consent forms were kept separate from responses,

allowing anonymous analysis of findings. Distractions were kept to a minimum in interview rooms, and recording and scribing done as unobtrusively as possible. Preparation for data analysis includes managing research data, for example consideration of data storage whether paper, electronic documents or audio files (Gillham, 2005; Thompson, 2000; Fielding, 2001); file naming conventions become important when the data set grows (Rehberger and Coates, 2012; Fielding and Thomas, 2001), allowing swift identification and retrieval of relevant data files. Careful planning led to internal standards being written and followed; the investment in preparation time greatly facilitated later analytic stages of the research. Interview notes were anonymised by removal of all names and identifying characteristics; all files, both electronic and physical, were stored in secure storage areas.

Qualitative data analysis techniques informed initial analysis of interview notes, recognising that common themes emerge from the cyclical process of building a coding structure and coding interview responses (Gillham, 2005; Bazeley, 2013; Silverman, 2010; Cresswell, 2014; Bazeley and Jackson, 2013; Saldana, 2013; Flick, 2007) and considering them alongside questionnaire responses. Emerging themes were used to support and provide evidence for suggested evolutions in the way employability is supported at DMU especially but not exclusively for disabled students. Frequently-mentioned suggestions were incorporated into the employability model and prototype framework as they arose.

3.3 Reflection

Research design evolved during the course of this study. It was anticipated that fieldwork would involve students over a number of academic years, enabling semi-longitudinal comparisons. It was also hoped that employers of students on placement could be included, partly to give the employer perspective in general and partly to shed a different light on students' own responses. As the study unfolded, it became clear that expecting students, especially students in the target learning difficulty population, to

respond to emails inviting them to take part in what might appear as yet another survey was expecting too much. Although fieldwork invitations were sent to students by support professionals they were already working with – Disability Coordinator or Placement Unit Officer – response rates were disappointingly small. A number of reasons were recognised and attempts made to overcome the relevant issues, but in the end what actually worked was personal face-to-face invitation. Those groups who were told about the research and asked if they would be interested in taking part did produce volunteers who came forward individually and of their own accord. Some groups were in module-based classes, some were in course-based employability awareness sessions. Great care was taken not to single out particular students, as that would introduce unwarranted bias, but verbal invitations could necessarily only be issued to a small subset of any year cohort. The samples cannot therefore be considered truly representative, merely indicative.

The attempt to contact placement students and their employer supervisors, which stalled due to interlocking consent requirements, demonstrated that not all perspectives that would be interesting to the study were possible to obtain. The student perspective and the employer perspective were sought separately, but the study lost the ability to relate the one to the other. The employer perspective was successfully obtained by interview fieldwork; the placement student perspective failed to materialise when a final-year student invitation, to students returning from placement, had no responses.

Fieldwork to find the employer perspective worked well, following established guidelines and careful preparation. Semi-structured interviews were built from questions designed to glean particular aspects of the research questions, and piloted with student support practitioners who brought their professional experience to bear. Resultant interview outlines were trialled with willing members of the target population; this exercise both proved the session outlines and provided practice in running the interviews. The preparation put into employer fieldwork proved a worthwhile investment of time and effort.

Conference workshop delegates, while not formally involved in the research, did nevertheless confirm some of the emerging findings that communication is one of the problematic aspects of any student's transition from studies to the workplace. Delegates could have been invited to take part in follow-up fieldwork, potentially with their own student populations, which could have provided a wider picture across HE. Although briefly considered, this was not pursued as it was expected to require much more resource than was available at the time, in both DMU and other institutions.

What can be concluded from the research study, therefore, is necessarily sited within one part of one university. Its findings may be taken as indicative rather than representative of hurdles students face when seeking to enhance their own employability. The study may be illustrative rather than definitive about helping disabled students navigate the journey to the workplace.

Chapter 4 Research activities and results

The development of the research question drove the course of the literature review, prompting several research activities. Research work investigated aspects of the underlying reality, each activity considering one or more of the student, academic tutor, student support professional and employer perspectives. Along the way, models were built to illustrate relevant concepts and how they interrelate. This chapter describes the activities in largely chronological order, explaining how each activity's findings led to the next activity and to model development.

Table 4.1 sets out the various fieldwork studies, showing target populations and participant numbers; fieldwork samples are in the appendices. Remarks by participants are attributed anonymously using participant reference codes.

study	target population	instrument	number of participants	timing	thesis section
preliminary study	disabled students yrs 2-3	interview	6	spring 2011 (pre-research)	4.1
placement study	disabled placement students	questionnaire	0	2012-13	4.2.1
	their employers	interview	0	2012-13	4.2.1
students on campus	disabled students yrs 2-3	questionnaire	3	spring 2013	4.2.2
	disabled students yrs 2-3	questionnaire	0	2013-14	4.2.3
	disabled students yrs 2-3	interview	7	spring 2014	4.9
curriculum	academic tutors	workshop	20	autumn 2012	4.5
employers	placement employers	interview	29	2013	4.7
framework pilot	disability officer	demonstration	1	autumn 2014	4.10.3
	careers adviser	demonstration	1	winter 2014	4.10.3
	students all yrs	questionnaire	10	spring 2015	4.10.3

Table 4.1 Fieldwork undertaken

Participant references were composed as follows:

- x = s (second year), p (placement student), f (final year), e (employer) or t (framework pilot student)
- nnmm = academic year for students, interview year for employers
- character 'n' for number
- three-digit sequence number

A similar table of participants was considered, setting out relevant details alongside reference numbers. However, with small numbers of respondents, the collections of characteristics could too easily be used to identify individuals and/or their organisational contexts. The extra detail is sacrificed in order to preserve anonymity.

4.1 Preliminary study and student support model

Earlier (pre-research study) work had identified several case studies of students with particular disabilities requiring academic accommodations, and reflected that, despite existing De Montfort University (DMU) recommendations, it was not always clear how the tutor should make the accommodations (Burrow et al, 2010). The question arose as to how a future employer would make the same accommodations. Would the student expect the same accommodation in the workplace? Would they get to the workplace at all, or would the application / recruitment process prove too difficult?

Within the higher education (HE) sector, students who report a disability are assessed and given appropriate support in a variety of ways, as discussed earlier in Section 2.2 Support for disability. For example, the assessment process at DMU is conducted by experienced professionals and culminates in a personalised report outlining relevant support. A summary of the recommended adjustments to teaching and learning methods is recorded in a disability support register. Academic tutors then provide part of the support within taught modules, based on the student's register entry.

Students on Technology courses are encouraged to do a placement year between their second and final years of study. The intention is for them to gain relevant work experience. Students may find placement jobs through a variety of routes, often through the faculty Placement Unit. The Placement Unit administers job advertisements, employer presentations, student applications and interviews, as well as academic tutor visits to students while on placement. For final year students and graduates, the Careers Service offers many similar services. These units support all students seeking employment.

The model of student support shown in Figure 4.1 demonstrates that support for disabled students seeking employment is the same as support for non-disabled students, the only difference being the added dimension of their disability which then triggers various support mechanisms.

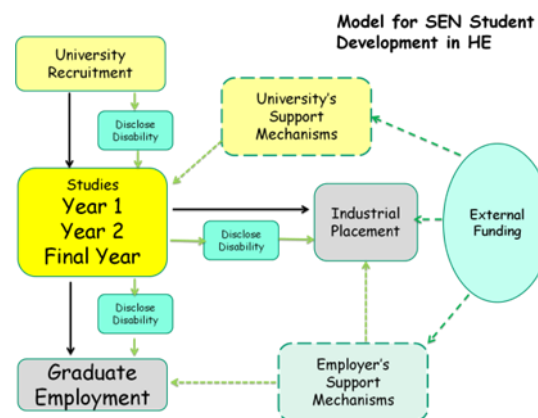


Figure 4.1 Model of Student Development at DMU

source: Clarkson et al, 2011

A preliminary study was undertaken to explore the nature of help available for disabled students seeking employment; fieldwork questions are shown in Appendix A. A short interview of disabled students on and returning from placement, who had been receiving support during their studies, found that although disabled students have the same needs for guidance as other students but to a greater extent, disclosure of disability was a

major concern. Individual interviews uncovered several other concerns, for example having a salary during placement year jeopardised the individual's Disabled Student Allowance. Similar questions about supporting disabled students seeking employment were posed to student employment advisers in a workshop at the NASES (National Association of Student Employment Services) annual conference in 2011. Discussion confirmed that communication was one of the major issues, in particular:

- employer understanding of disabilities and available resources
- advising students about disclosure to potential or actual employers
- advising academic tutors writing references for students with disabilities generally and undisclosed difficulties in particular.

The preliminary study found much information available, but knowledge of what is available and how to find it was good in some areas but less well-developed in others, as seen in literature Sections 2.2 Support for disability and 2.4 Recruitment. For example, there was much disability-related guidance developed by groups of employers for employers, lending both focus and credibility, as well as organisational role models and exemplars. The study concluded that the transition to employment needed to be better understood and better supported, especially for students with disabilities, and that although there was much excellent support and advice available there were areas where support was lacking for all parties: students, their tutors and their potential employers.

4.2 Student fieldwork attempts

Following the preliminary study, student views were sought in conjunction with faculty Disability Coordinators, during two successive academic years. Response rates were very low, with only a handful of questionnaires being returned. Disability Coordinators reported that their own student support-related surveys also had very low response rates. There could be a number of reasons for this, and various alternative approaches were taken in the subsequent fieldwork attempts, still with very low response rates.

4.2.1 First attempt

The first attempt took the form of a placement study (2012-13), designed to include students on placement (by questionnaire) and also their placement employers (by interview). Appendix B.1 shows the anticipated process flow for the study.

Questionnaires and interview topics were drafted based on preliminary study questions, also shown in Appendix B, and the questionnaire was redrafted and streamlined to make it easier to complete. Questionnaires were to be administered through the Disability Coordinator, to exploit her existing relationship with the students, but with the knowledge and agreement of the Placement Unit manager, who in turn, had placement-related relationship with the students and employers. Invitation response rate was again disappointing, with one student enquiry but no agreements to proceed. Reasons were analysed and a list of lessons drawn up, for taking forward in future fieldwork. For example, whilst email is a useful contact mechanism (a file can be attached easily and just as easily detached and returned by the student), research emails should be announced using some more personal medium; an online questionnaire version should also be created to eliminate the need for emailed forms. Research should be related to something else the students are already doing. Questions should be snappier and the structure easier to follow. Consideration should be given to providing a token of appreciation to participating students.

The placement study was then replaced by several smaller studies, involving students currently on campus rather than on placement. Student experiences of seeking a job and their expectation of what support might be available in the workplace were to be gathered from second-year students. Student experiences of finding a job and what support had actually been available to them in the workplace were to be gathered from final-year students. Employers' views were to be gathered through a series of interviews with current placement employers regardless of which students they had hired. The student and employer studies would thus be decoupled, increasing the potential for survey success.

4.2.2 Second attempt

The second fieldwork attempt (spring 2013) thus focussed solely on students. The questionnaire was split into two versions, one for each of second- and final-years, and simplified as far as possible to make it easier to fill out, as can be seen in Appendix C. The second-year part looked for student expectations of getting a job and practical support in the workplace, whilst the final-year part looked for student experiences. Each questionnaire consisted of several sections, although no student would need to answer more than 10 questions. By the time all fieldwork instruments were ready, most of the academic year had elapsed. The questionnaire was sent electronically, again to facilitate responses. However, the response rate was negligible (three responses from over 150 questionnaire recipients).

4.2.3 Third attempt

On the third attempt (2013-14), fieldwork instruments were developed during the summer to ensure they were ready before the start of the academic year. The redevelopment took into account some things that had been missed earlier, for example the student perspective of filling out a questionnaire. The resultant questionnaire appears in Appendix D. Rather than being administered only once in the academic year, the questionnaire was sent out at several points, starting before students returned to campus and notably including follow-up in both employability weeks (which had recently been instigated, one in the autumn term and one in the spring term, as weeks devoted to employment-related activities). Despite the varied timing, response rate was still very low. A set of reminder cards was produced and given to relevant students during the spring term, by Disability Coordinator and by some of the professional support mentors. Despite all these actions, no further responses arrived. The research study concluded that questionnaire survey was not an effective data-gathering technique with this particular population. This suggests that students with learning difficulties might be less likely to see or respond to survey invitations, perhaps due to their learning difficulties. Outside the scope of this research, further work could investigate the presence of unintended bias in published studies that did not take this possibility into account. Further work could also investigate the validity of the suggestion.

4.3 Communication model

The preliminary study found communication to be one of the major issues in advising disabled students on employment matters, as highlighted earlier in Section 4.1

Preliminary study and student support model. In trying to understand the problems, a picture emerged from discussion, initially focusing on students with specific learning differences. The existence of disability-related legislation was clear from the literature, and confirmed by the faculty disability coordinator. Advice on coping with learning difficulties was available for students, and advice on supporting learning difficulties in the classroom was available for tutors; both these sets of guidance underpinned the discussion. Insights were provided by the disability coordinator, from her experience supporting both students and tutors; and by the placement unit manager, from her experience supporting placement students, placement tutors, and placement employers. Academic tutor insights were contributed by the two academic tutors on the fieldwork team, from our experience supporting students on campus and on placement.

Figure 4.2 shows the various forms of employment-related communication identified

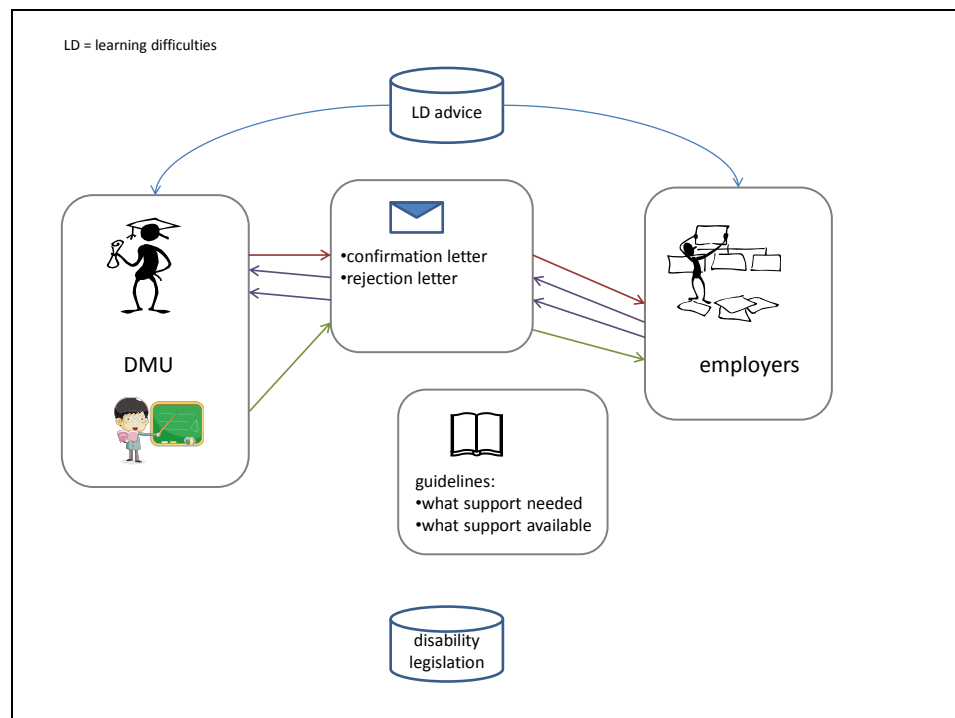


Figure 4.2 Initial communication model: students with specific learning differences

between students and employers. It also shows that advice about learning difficulties is needed by employers and students alike, as well as by academic tutors. Disability legislation is part of the picture, reflecting the Equality Act (2010) which educators and employers must adhere to if they are aware of a disability. The picture also includes tutors, as they provide academic references to employers about individual student applicants. The initial model then depicts advice and guidelines as being available but not easy to find when needed.

This initial picture of communication was developed into a model that included the disability coordinator as a further stakeholder. Arguably, the communication model could also include placement and careers advisers in a student support group, although in this university the different advisers did not form a homogenous group. Further, the recruitment-related relationship between academic tutor and employer was made more explicit. The resultant model is shown in Figure 4.3 and depicts several channels of communication between students, tutors, support professionals and employers. The recruitment process can be thought of as a multiway conversation, with actual

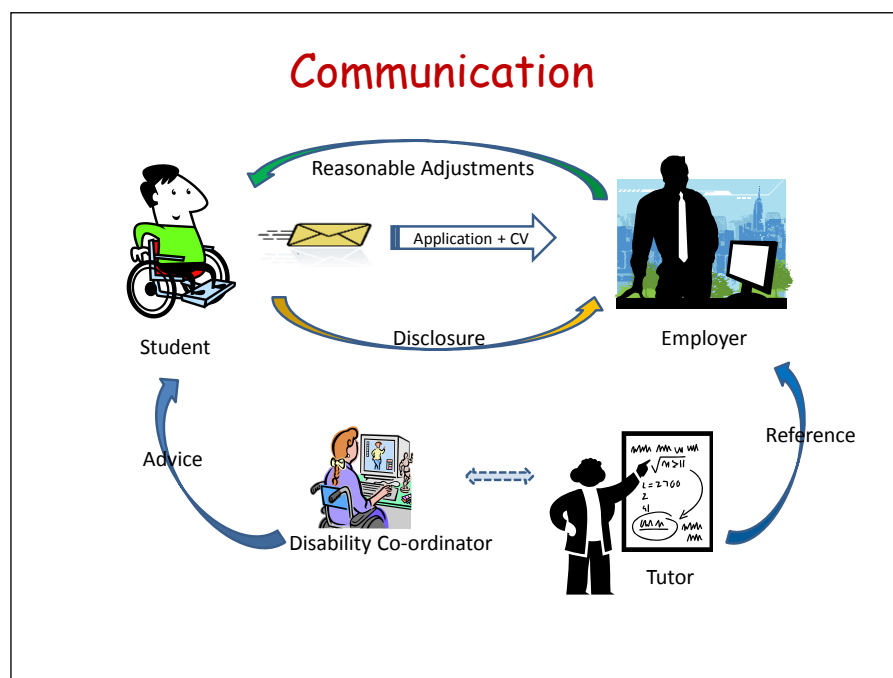


Figure 4.3 Communication model: disabled students seeking employment

communications taking the form of letters, emails, telephone conversations and face-to-face meetings, as well as application forms and CVs.

Students write to employers to apply for jobs; employers respond to invite them for interview. Employers write to tutors to obtain references for the students. When disabled students apply for jobs, there is the added dilemma of when to disclose the disability; too soon and the student fears their application will be rejected immediately; too late and the employer may have to back out of an offer. Preliminary study responses reported both of these outcomes. Students may, and often do, seek the advice of the disability coordinator in trying to resolve these issues.

4.4 Employability model

The preliminary study also surfaced a tendency amongst disabled students to see their disability in a negative light, sometimes as an almost insurmountable obstacle to employment. Education of all students, but especially disabled students, must be wider than just course-related studies. While getting the best degree they can is crucial, developing as a person is equally important. To this end, many module delivery methods give students practice at what were seen in the literature as “employability skills”, for example giving presentations, participating in group work, and keeping logs of laboratory work.

To help students understand employability in general and their own in particular, the nature of employability and what contributes to it were encapsulated into the employability model shown in Figure 4.4. Comprising four profiles, the model showed that employability includes a number of factors, not just the academic outcomes. Again, as seen earlier in Section 2.3 Employability, the literature confirms the multi-faceted nature of employability. The employability model then grouped the various facets into four profiles; within each profile there were factors that contribute to an individual’s effectiveness in the workplace. The model was also intended to show example activities

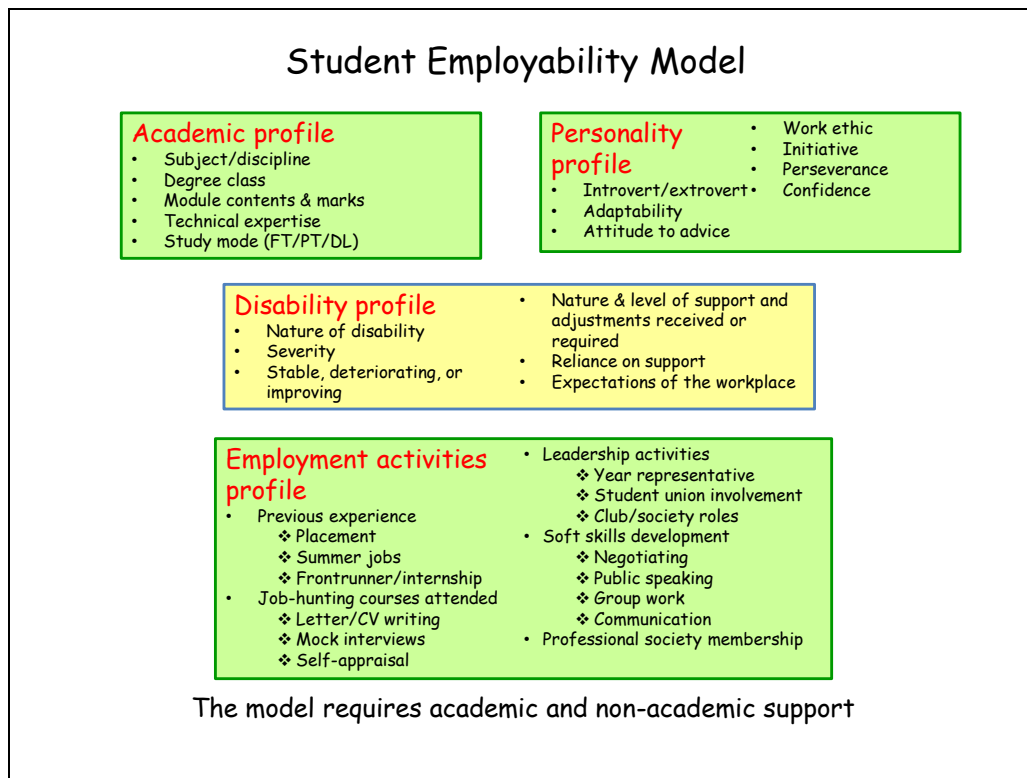


Figure 4.4 Employability model

to improve a student's employability, to develop their skills in the relevant area. The profiles were not meant to be discrete; a holistic view was advised rather than concentrating solely on any one profile to the detriment of the others.

Employer requirements were inherent in the model and informed the factors that constituted each profile. For example, most computer system development jobs involve working in small teams, and one component of the model was group work. A self-confident individual will be able to carry out work-based tasks more readily than one who needs constant reassurance; confidence was thus incorporated in the model. An understanding of the accepted practices within a subject discipline is an essential foundation for applying those practices; this was built into the academic profile within the model.

The initial version of the model arose from the researchers' prior experience as placement tutor and as recruiter of graduates for jobs in computing, as well as from consideration of early literature and fieldwork findings. Clearly, students embark on university study programmes in order to gain a degree or similar qualification, and in the UK at least, that means choosing a subject or discipline to study. The academic profile, then, collated subjects and topics studied and skills and knowledge gained. As an employer, one looked for more than just subject skills; personal characteristics such as confidence and adaptability also came into the picture, in the personality profile. Recruitment and teaching experience both had demonstrated the importance of extra-curricular activities such as work experience, student society participation, and even student membership of professional bodies; these filled the employment activities profile.

Some of the employment activities shown may be peculiar to De Montfort University. The availability of a placement year in industry has been described earlier in Section 4.1 Preliminary study and student support model. The university delivers numerous training sessions to prepare students for recruitment success; for example the faculty's placement unit runs sessions on writing a curriculum vitae (CV) and covering letter, as well as sessions giving practice on interview skills and self-appraisal. DMU also runs a Frontrunner scheme, as mentioned earlier in Section 1.3 Research effort; this offers students typically 5-10 hours of paid experience a week, working as research or administrative assistants in research units or academic teams. In common with most universities, DMU offers a wide variety of student leadership roles such as student society committee roles, sports club organisation, student union volunteering, and student representation roles.

The model included a disability profile, prompted by the proportion of students at DMU with disclosed disabilities, and in particular having declared learning difficulties. Figure 4.5 demonstrates that roughly 17% of students may have needed to take disability into account when searching and applying for jobs, with learning difficulties predominating.

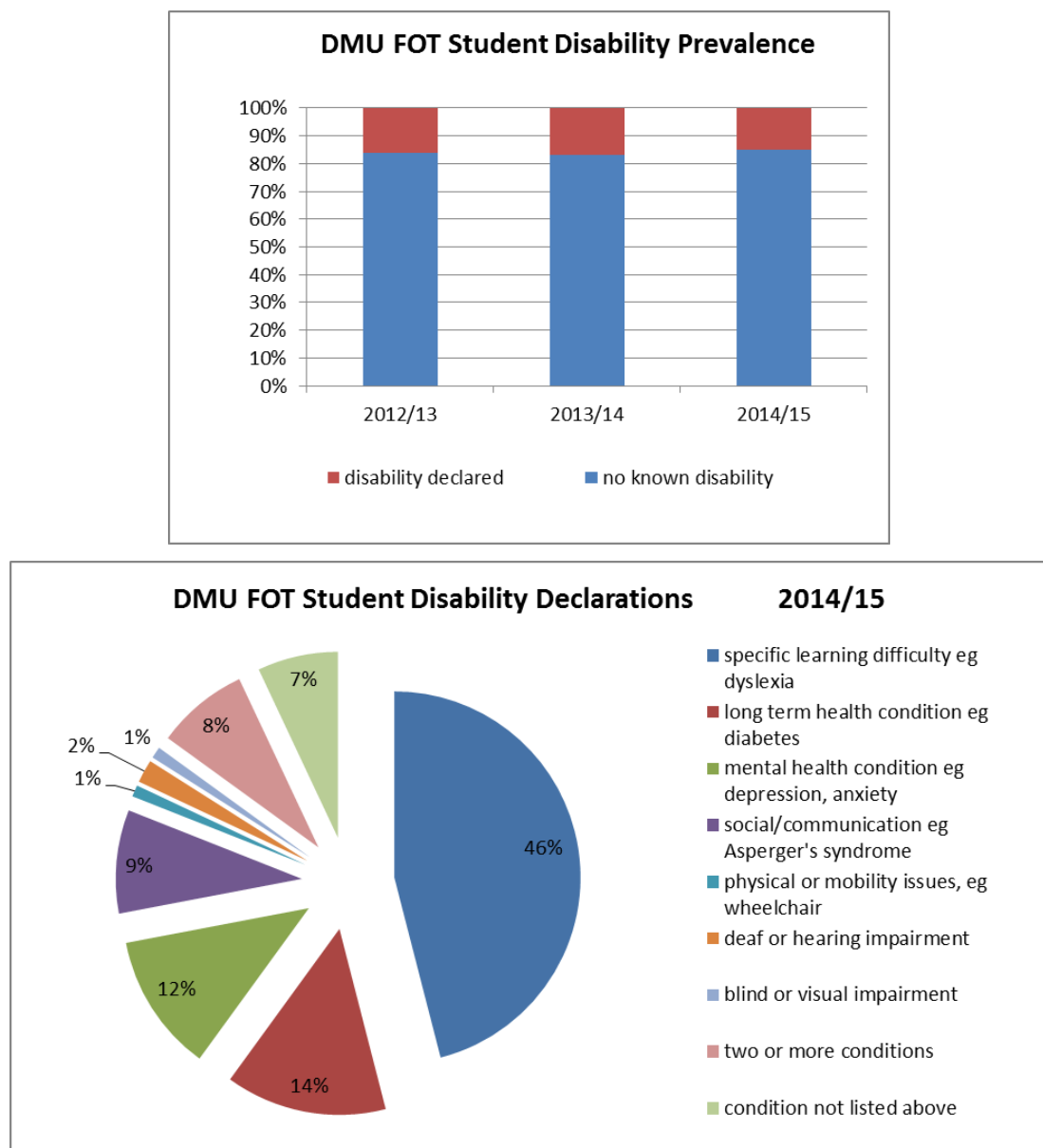


Figure 4.5 Declared student disability in FOT

Data source: DMU Official HESA Data 2012-15

In response, DMU has developed strong support services for students with learning difficulties, conducting research and building it into practice over many years (for example Pavey et al, 2010; DMU, 2006 and 2014; Griffin and Pollack, 2005 and 2009).

The disability profile, then, included early literature and fieldwork study findings, to reflect the fact that students relying on support for their learning may also need support

for a job search, and perhaps for some workplace tasks as well. Elements of this profile included nature and severity of the disability, along with nature and level of support received or required. The inclusion of student expectation of workplace support was intended to prompt students' own thinking of what they did expect. There was also a realisation, particularly for this profile, that elements were likely to evolve as the research progressed.

It can be seen that the academic, personality and employment activities profiles are relevant to all students, and the disability profile is only relevant to those students with a disability. This underlines the fact that disabled students need to resolve exactly the same employment-related issues as non-disabled students but with the added dimension of their disability, echoing the earlier model of student development seen in Section 4.1 Preliminary study and student support model.

The employability model was presented to a workshop at the ASET conference 2012. ASET is an association of employment and placement service professionals in HE and the conference was about measuring the impact of student services provided. The workshop introduced the model incorporating disability factors alongside academic and other profiles.

The employability model differs from those already in existence in the literature, as seen in Section 2.5 Employability models, by including students with disabilities (whether specific learning difference, physical disability or mental health), and by enabling students to enhance their own employability. The model would draw students' attention to what makes them employable and what they could do to improve their chances.

The conference workshop confirmed the multi-faceted nature of employability. Participants also discussed other factors that impinge upon employability. Major topics focussed on disclosure of disability (some HE institutions did advise students to disclose, others preferred not to advise); attitude to disability, encompassing the students', the employers' and the work colleagues' attitudes; managing student

aspirations as regards intended area of employment. Some further factors were also suggested for inclusion in the model, mostly in the personality profile, for example motivation, attitude, and attitude to disability. The workshop thus contributed to employability model elements.

4.5 Employability activities built into teaching

The Faculty of Technology (FOT) held a teaching and learning away day in September 2012 and a workshop on employability was included; participants were mostly academic tutors but also included some administrators. The definition of employability seen earlier in the literature review, Section 2.3 Employability, was presented to the workshop, and tutors were invited to suggest skills, knowledge and experiences that contribute to employability for jobs within their subject areas. Wall charts were used to collate activities written on post-it notes, showing what skills and knowledge were developed in which year of study (shown in Figure 4.6) and if the activities were

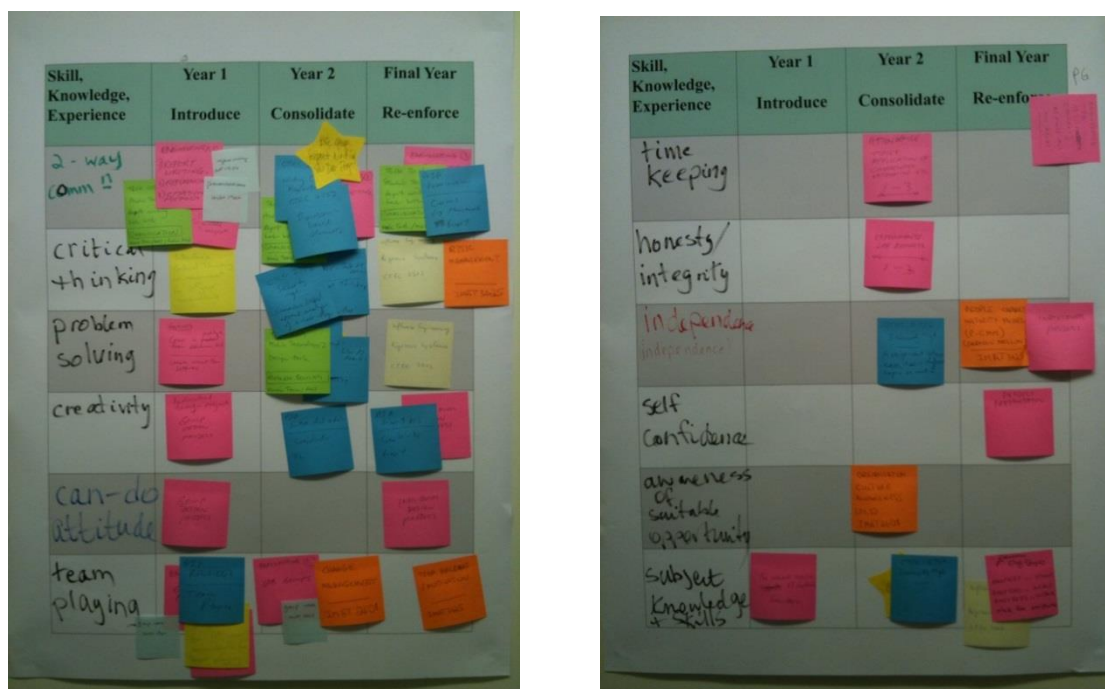


Figure 4.6 Employability skills in FOT and where taught

assessed, how they were assessed (shown in Figure 4.7). Detailed content of the wall charts can be seen in Appendix F.

Skill, Knowledge, Experience	Which module/course/session?	Teaching activity	Assessed? How?
time keeping			pencilised
communication			report
Honesty/integrity			negative: Transition
honesty/integrity			personalise falsification
problem solving			
critical thinking		business case studies	assignment yr 2
creativity			yr 3
technical skills		case studies	easy to see hard to define hard to measure
project management		action journey	

Figure 4.7 Employability skills in FOT and how assessed

4.5.1 Building the skill charts

Tutors suggested a range of things as skills, experience and knowledge relevant to employability. Arising in a general discussion, some of these skills were initially suggested as relevant to one discipline or another, for example creativity within engineering design projects, or honesty and integrity in a context of truthful reports on lab experiments. During the workshop, however, participants tended to agree that most skills applied in all disciplines. The list of employability-related skills can be seen in Table 4.2. The skills were written into the first column of a blank wall chart, as can be seen in Figure 4.6.

Participants agreed that students were already learning these skills, as part of their studies. Tutors also agreed that first year modules largely introduced skills and concepts, second year modules helped students to consolidate their understanding and skills, and third year and postgraduate modules allowed students to reinforce skills and

Skill, knowledge, experience
2-way communication
Critical thinking
Problem Solving
Creativity
Can-do attitude
Team playing
Time keeping
Honesty / integrity
Independence
Self confidence
Awareness of suitable opportunities
Subject knowledge and skills

Table 4.2 Tutors' suggested employability skills

understanding and to really demonstrate their ability. Participants identified modules which developed student capabilities in these employability skills, wrote each activity on a post-it note, and stuck it on the wall chart in the appropriate year-of-study column. Post-it blanks were loosely colour-coded by discipline, as in Table 4.3.

Programme/faculty	Colour/shape
Computing, ICT	Orange square
Engineering	Pink square
Accountancy	Yellow square
Media Studies	Green square
Computing/BIT	Yellow star
Software Engineering	Cream square
AI & Robotics	Blue square
Computing HND	Small pale blue square

Table 4.3 Workshop post-it colours

Modules were identified for each employability skill, across the years. On some courses, such as in the school of engineering and in media production, employability skills were developed in a progression of modules from year to year. For example, under 2-way communication, in engineering in the first year, students learn basic report writing, referencing and citation methods; in the second year students practise more report writing to higher standards; in the third year they write reports and also present them orally and in posters. Other skills were developed during particular years without

being part of a deliberate progression. For example, problem-solving capability was developed in a first year engineering module by requiring students to create a prototype working model from parts in an electronics kit. On a different course, a second year artificial intelligence module built an assignment around a business problem for students to explore and make decisions. And in a third year software engineering module, students were given an outline brief and needed to investigate and come up with a working piece of software, weighing up options and making decisions along the way.

The resultant poster is summarised in Table 4.4; the full detail appears in Appendix F.

Skill, knowledge, experience	Year 1 - introduce	Year 2 - consolidate	Final year – reinforce (also PG)
2-way communication	Eng: 1- report writing, 2- referencing, 3- citation methods Media: Audio Tech report writing and lab book Comp: presentations and report writing	Software Dev Prj: report writing Comp: discussion-based seminars, writing concise reports Eng: report writing Media: audio tech report writing and lab book	AI: professionalism Project management Eng: report writing, oral presentation, poster Media: Studio Tech: report writing and lab book
Critical thinking	Accountancy: assignment	AI: seminars based around analysis of a case study Comp: case study	Computing: risk management
Problem Solving	Eng: create a prototype from electronic kit; create circuit from software	Media: audio technology design task AI: assignment around business problem/decision AI: problem solving Comp: SW Dev Proj	Soft Eng: rigorous systems problem solving to get a working solution
Creativity	Eng: individual design project; group design project	AI: intro AI and Robotics: creativity	AI: final year project Eng: individual design project
Can-do attitude	Eng: group design project		Eng: individual design project
Team playing	Comp: group work AI: robot club Accountancy: group work Eng: working on group project	Eng: lab groups Database des: group work Computing: change management	Computing: team building and motivation

Table 4.4 Employability skills in modules (continues....)

Skill, knowledge, experience	Year 1 - introduce	Year 2 - consolidate	Final year – reinforce (also PG)
Time keeping	Eng: attendance; strict application of coursework extension policy	Eng: attendance; strict application of coursework extension policy	Eng: attendance; strict application of coursework extension policy
Honesty / integrity	Eng: experiments and lab reports	Eng: experiments and lab reports	Eng: experiments and lab reports
Independence		AI: assignment where each has different topic to work on	Eng: individual project
Self confidence			Eng: project presentation
Awareness of suitable opportunities		Computing : organisation culture awareness	
Subject knowledge and skills	Eng: relevant topic of electronics	AI: security management Computing: OO Programming	Eng PG: some modules, final thesis Soft Eng: rigorous systems

Table 4.4 Employability skills in modules, contd

4.5.2 Building the assessment chart

Workshop participants also discussed where employability skills were assessed. Not all skills were explicitly assessed, and some assessed employability skills had not been cited earlier in the workshop. Timekeeping in particular was assessed but more in the breach, late submission being penalised. Problem solving, critical thinking and project management were all assessed using case studies in exams and assignments, typically in second and third year modules. Honesty and integrity were assessed in relation to citing published sources used in written assignments, across the faculty; these skills were also assessed in relation to lab results, with falsification of results being penalised. The resultant poster is summarised in Table 4.5.

The workshop thus contributed to the employability model. Within the academic profile, example aspects were realistic business case development and assessed practical log books; these were boiled down to ‘linking technical expertise to real world problems’. Within the personality profile, example additions were ‘creativity’

Skill, knowledge, experience	Which module, course, session	Teaching activity	Assessed? How?
Communication			Reports
Problem solving, critical thinking, creativity		Business case studies	Case studies in exam, tutorials, coursework
Flair/creativity		Across journey	Easy to see Hard to define Hard to measure
Time keeping			Penalised
Honesty/integrity	(link to employment references)	coursework	Negative: plagiarism
		Lab results	Penalise falsification
		also involves what is assessed – outcome or reporting?	
Technical skills and critical thinking	Year 2	Case studies	Assignments
Project management	Year 3	Case studies	Assignments

Table 4.5 Employability skills assessed

and ‘honesty/integrity’. Within the employment activities profile, example soft skill development additions were ‘report writing’ and ‘team working’.

4.6 Employability model and measurement

The emerging employability model and measurement framework were presented to the Higher Education Academy Science Technology Engineering and Maths (HEA STEM) conference on Learning and Teaching in April 2013. The intention was to gather perspectives from academic tutors in technical subjects, to put alongside perspectives from support professionals gleaned from earlier conferences.

Earlier findings and models were summarised into a poster showing four quadrants, one each for communication, impact of disability, employability activities, and an embryonic employability measurement framework, as shown in Figure 4.8. The poster was displayed in a poster exhibition, and presented to a workshop.

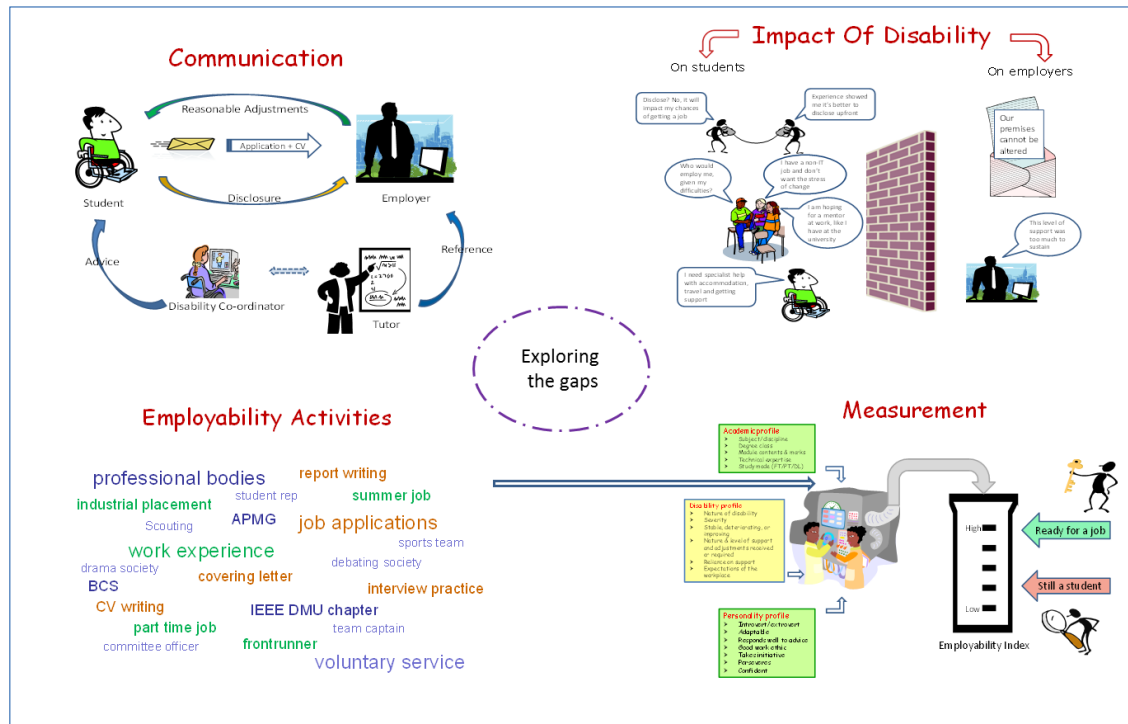


Figure 4.8 Aspects of disabled student employability

source: Clarkson and Esendal, 2013

4.6.1 Poster development

The **communication** quadrant presented the communication model described earlier in Section 4.3 Communication model. The **impact of disability** quadrant collated quotes and findings from the preliminary study, expressing the perception that disability does indeed present barriers to recruitment and to employment, both for disabled students and for employers. The preliminary study had interviewed six students and one placement employer, and had received questionnaires from four students. Quotations unreadable in Figure 4.8 are set out below in Table 4.6. One student, not quoted in the poster, had decided against doing a placement, but for reasons unrelated to disability: “I was not keen eventually as no-one else on my course got a placement and when I returned to study it would be with different people. I went for one interview but decided it wasn’t the right job for me” (f1011n003).

quoted perception	participant ref s = second year p = placement f = final year e=employer
Disclose? No, it will impact my chances of getting a job	p1011n004
Experience showed me it's better to disclose upfront	p1011n004
Who would employ me, given my difficulties?	Pre-study, prompting the research
I have a non-IT job and don't want the stress of change	s1011n001
I am hoping for a mentor at work, like I have at the university	f1011n001
I need significant help with accommodation, travel and getting support	p1011n001 p1011n003
[employer's] premises cannot be altered	p1011n001
This level of support was too much to sustain [for more than the placement year]	e1011n001

Table 4.6 Perceived impact of disability

The **employment activities** quadrant expanded the employment activities profile from the employability model seen in Figure 4.4, depicting the activities in a diagram where related activities were linked by font colour, with category headings in larger type. The **measurement** quadrant depicted the various aspects of a student's employability, including all four profiles, being fed into some sort of algorithm and resulting in an employability index. The index, on a scale from low to high, would indicate how far the student had progressed from being a student to being ready for a graduate job. At this stage in the research, the study was exploring what the algorithm might be and what the index might consist of. The intention was that a student could use the model early in their course of study, to work out their starting level of employability, and then monitor their own development as they progressed through their study years and activities.

The measurement quadrant therefore outlined the measurement tool envisaged at the time, depicting the anticipated growth in employability as the individual student worked their way through their studies and any employability activities they took part in.

4.6.2 Workshop reaction

The workshop session presented the poster and its quadrants. The workshop accepted that recruitment communication did need to include disability support professionals as well as tutors. Participants agreed that the question of disclosure was a tricky one, although there was little in the way of answers as to when to disclose disability. There was agreement on the employability activities suggested in quadrant three, as a set of examples rather than an exhaustive list. Students should be encouraged to look at their own experiences and activities, and take confidence that they have been developing work-related skills already without realising. This opinion echoed the views from the DMU teaching and learning workshop, that tutors were already helping students to develop employability skills.

There were strong challenges to the concept of an employability index. The conclusion was that the index was too simplistic, ignoring the wide range of activities and skills that underlie employability. By focussing on the number, students would lose sight of the skill development at the heart of the model. This objection echoed the note of caution sounded in the literature, as seen in Section 2.6 Measurement.

The workshop concluded by agreeing that it was helpful to put all the facets of employability into the one model, to aid discussion about work-related skills and how these might be developed.

4.7 Employer fieldwork

Student and employer studies had been decoupled as discussed earlier in Section 4.2 Student fieldwork attempts. Employer fieldwork began in 2013, interviewing employers who hired DMU Technology students on their industrial placement year. The aim was to gain employer perspectives on student disability and how it impacted employability, looking at, for example, how workplace support and/or adjustments were found and made, and whether they had found adjusting for disability to be problematic in any way.

Fieldwork was designed as a set of semi-structured interviews exploring perspectives from all placement employers, not just those who were aware their students had disabilities. A list of current placement employers was obtained from the Technology Placement Unit manager, from which to draw contacts for both piloting and carrying out the fieldwork. Fieldwork instruments – phone invitation script, consent form, interview questions – were trialled with relevant internal professionals: Placement Unit Manager, Disability Coordinator, Employability Manager. Final versions of interview question sets can be seen in Appendix G. Fieldwork interviews took place between August and October 2013. Some employers were internal to DMU, being line managers of students on internal placements or internships; some employers were external to the university, local to Leicester; these were also line managers of placement students. Several managers from one large employer in the East Midlands took part; this organisation is perhaps atypical in being highly inclusive of diversity and in giving strong support to this research. All interview data was depersonalised for analysis.

Employer fieldwork thus yielded a rich data set. Participants gave their insights on the planned questions and also on particular perspectives they wished to contribute, including what advice they would give to a disabled student or graduate trying to find a job in their field, and what advice they would give them on settling into the workplace. Some employer participants had disabilities themselves, and were able to give the perspective of a disabled person in the workplace.

Of the 29 people who took part, six (21%) were line managers of placement students in an HE setting; one participant also had a disability. Two participants (7%) were line managers of placement students in a voluntary sector setting. Fifteen (52%) were line managers in a large private sector company; some had managed recent graduates and some had not; some had disability themselves. Four participants (14%) were support staff in the company setting, working in such areas as human resources (HR) and an assistive technology team. For the purposes of this analysis, all these 27 people are termed employers. The remaining two participants (7%) were staff members in the large company setting, and gave some non-managerial insights. The work settings were

primarily technical, applying technology to business needs, finding technology-based solutions to business problems, and maintaining the solutions.

There were three major topics within the interview structure: disclosure during recruitment, supporting disability in the workplace, and sources of information about disability. In the company setting, an extra section was added during fieldwork, collecting participants' advice for students on the two topics of finding a job and settling in to the workplace. Themes emerging from responses can be seen in Table 4.7; responses to interview topics are discussed below, with themes underlined in the text.

interview topic	theme
Disclosure	Disclosure, when if at all
	Understand own need for support
	Fear of rejection upon disclosure
Supporting disability	Range of support available in workplace
	Varied funding for support
Sources of information	Information sources varied
	HE preparation for the workplace
On finding a job	Disability not a barrier
	Importance of relevant skills
	Know yourself
	Realistic aspirations
	Develop self-confidence
	Difference as a strength
	Open honesty about any needs
	Adaptability
	Motivation to work in the field
	Disability-friendly employers
On settling in	Open honesty about any needs
	Discuss support needs
	Deal with discrimination
	Importance of technical curiosity
	Resilience
	Explore available support
Advice for HE	Support for line managers of disabled students
	Develop self-confidence and self-awareness

Table 4.7 Employer fieldwork response themes

4.7.1 Disclosure during recruitment

When asked when during the recruitment process employers would expect a disability to be disclosed, two occasions were reported. Most application forms included an opportunity to disclose that the applicant had a disability but not what kind. One line manager preferred not to know about disability when selecting candidates to invite for interview, as “subconscious bias might mean going for an easier interview or easier applicant” (e1313n010). Invitations to interview offered reasonable adjustments to enable candidates to take part, and most employers expected discussion about those needs during the interview. Disabilities also arose during the course of a working career; these would be discussed “only if it had a direct impact on [doing] the job” (e1313n014). Employers all expected applicants, students included, to suggest what accommodations would be suitable for interview. They also expected applicants to have thought forward to the job role, and be able to discuss what they might need in order to be productive, expecting individuals to understand and articulate their own needs.

Employers recognised that applicants did not always disclose so early on. Many line managers had been able to discuss adjustments before or during the interview, but also reported that some disabilities only came to light once the job was underway, when the need for accommodations became clear and relevant. Reasons for the difference between expectation and reality varied. In many cases, it was seen to depend on the type of disability and how it affected the work; in many technical roles, for example, disability appeared to make little difference to performance. Employers reported that some people felt uncomfortable with disclosing, while others did disclose because they were aware of the advantages of a working environment adjusted to their needs. One line manager expressed the dilemma as “not putting it on the paperwork for fear of rejection” (e1313n007). It was also acknowledged by one line manager that “people are not confident with asking [for support] and not knowing what to ask for” (e1313n026).

4.7.2 Supporting disability in the workplace

Turning to support for disabled people in the workplace, nearly all participants would look to the relevant HR and/or occupational health (OH) experts within their organisation. The smaller voluntary sector employers, who did not have access to in-

house experts, looked to the student's HE institution for guidance, and made what recommended adjustments they could. Line managers' roles in the support process were mainly to work with the disability experts. Three line managers summed it up neatly: "make any adjustments that are for the line manager to make" (e1313n004), "make sure the OH assessment is done" (e1313n011), and "keep an eye on the support process" (e1313n012). The range of support available was impressive, although several participants recognised that larger organisations have more resources and are able to devote more to disability support than are small organisations. Physical support included ramps, lifts, automatic doors, near car parking, adjustable furniture. Assistive technology was widely used for things like speech recognition, word processing, audio reading, braille input and output. Organisational support included internal disability support groups, a buddy mentoring system for (all) new joiners, as well as finding other ways of working, for example face-to-face meetings rather than conference calls for the hard of hearing, or use of phone rather than email by people with dyslexia. Emotional support was reported to treat the person as a whole person. One disabled staff member particularly valued the reassurance that the company was prepared to help, even if it cost money (e1313n009).

Asked about any issues with providing support for disability, most participants reported no issues. Some expressed a concern to get it right, "not wanting to say the wrong thing" (e1313n013), and were glad to call in the experts in HR and OH. One line manager with dyslexia incorporated it into his leadership style, "modelling the open behaviour I want from my people" (e1313n026). Some participants recognised that funding could be an issue, partly in organisations without large budgets and partly in less affluent sections of large organisations. Some issues were reported around sensitivity, for example "you want to do what's right for people without being patronising or over-concerned" (e1313n025). One participant felt that people sometimes hide behind their disability and use it as an excuse for poor performance or to avoid certain tasks (e1313n024). Another felt uncomfortable with a sense that people might be left unsupported: "if only they'd declared the problem we'd have been able to help" (e1313n023); one manager expressed it as "unless they tell you, you can't help"

(e1313n024). Another participant recognised the impact of “other peoples’ reactions because they don’t understand it, don’t know autism” (e1313n026).

Once support arrangements had been put in place, they were reviewed regularly as part of the annual staff review process in most instances but not all. A participant in one organisation reported that no review took place; several reported that review would be triggered by a change in requirements.

4.7.3 Sources of information about disability

Exploring sources of information about disability and support, all participating HE- and voluntary sector-based employers, who were all employing placement students, turned to university HR, disability and placement support departments for guidance and information. Two of these line managers expressed a desire for better information for themselves as line managers of disabled students. Within the large private-sector company, no-one would think to ask a university. They would consult HR/OH departments first, and supplement what they learned with information from external sources.

About half the participants were aware that external support organisations exist; most of those who were not would search for relevant information on the internet. A few would seek relevant awareness training. One knew a local expert not connected with the organisation; two would discuss options with the disabled individual. One participant used awareness of external support to validate and champion the internal support available (e1313n014). As one participant expressed it, “the detail is not relevant until you need to use it” (e1313n017); another remarked “there is a wealth of [information] out there but you don’t find it until you need it, sometimes you don’t find it when you need it” (e1313n002).

4.7.4 Advice about finding a job

Participants in the single large company represented part of the technical field that graduates of computing-related courses might target in their job searches. Several of them had advice they wanted to impart, and this was built into subsequent private-sector

interview structures, as can be seen in Appendix G.2. The advice was primarily for those with disability, although nearly all emphasised that the advice was relevant to all applicants, disabled or not.

On trying to find a job in the technical field, the most immediate response was that disability was not a barrier to doing the job. The most frequent advice was related to the skills needed for the job, the main question being having the skills to do the work; “if you can do the job, go for it” (e1313n012); “go for it so long as you have the capabilities for the job” (e1313n021). Coupled with the skill set was advice to know oneself and what one brings to a company. Graduates were advised to focus on strengths and sell themselves on that basis. Students and graduates also needed to be realistic in their aspirations, and to take account of some practical things: “practical factors need to be considered” – but only as practicalities (e1313n008); “be realistic: don’t aim to be a builder if you can’t climb a ladder” (e1313n020). Confidence was important, too. Graduates with dyslexia or other cognitive differences were encouraged to see the condition as a difference rather than a disability; to be creative and see the world in a different way, not underestimating the ability to think multi-dimensionally. Graduates with any disability were advised not to let it affect their confidence, but to use it to build their strengths and help develop their weaknesses. Several participants, whether line managers or not, strongly advised openness and honesty about any particular needs an applicant might have. People were advised to “talk about our challenges even if it doesn’t feel natural – if you don’t say ‘what that means is’ then others are relying on their assumptions and can’t really take [actual needs] into account” (e1313n025). Adaptability was important, in the sense of a willingness to learn the role and do a great job. Motivation was also important, and here the advice was for all applicants, to make sure they wanted to work in the field they were applying to.

Recruitment-related advice referred to the tendency for larger organisations to have more capacity to give comprehensive support well beyond the basic legal support requirements, to be able to be disability-friendly. Disabled applicants were advised to find employers in the disability-related Two Ticks scheme, find employers who

provided good entry-level roles in their chosen field, and apply to those employers appearing on both lists (e1313n022). Another recommended approach was to look at job advertisements that welcomed applications from disabled people (e1313n022).

7.4.5 Advice on settling into the job

Once an applicant had navigated the recruitment process successfully, advice on settling into the job again emphasised openness and honesty. Recent graduates were advised to discuss support needs or things that would help do the job, certainly with the line manager but also with their buddy if they had one, with colleagues and team members, and with the HR/OH specialists. Thus people should highlight any activities that caused them difficulty. The discussion was not just to help the disabled individual but also the people they worked with: “make sure your colleagues are aware that there is a disability and aware of how you want to be treated” (e1313n024). This would help colleagues to know both how they can help and how to avoid inadvertently getting in the way. Students and graduates with difference of any kind were advised to recognise that discrimination does exist in society and in any workforce, however well-intentioned the organisation and however well-aware colleagues were; disabled applicants were advised to “do what you can not to be discriminated against – go half way to people” (e1313n020). Allied to open honesty was willingness to ask questions and seek advice. This was true for disability-related concerns: “larger organisations have people and processes in place – ask for help” (e1313n010); and for general job-related concerns: “ask a million questions, don’t expect to understand a large organisation for about 6 months, take your time” (e1313n015). Linked to this advice was a need for resilience: “be patient but also take ownership of your disability, be tough and resilient” (e1313n023). Exploration was suggested by many participants, staff and managers alike. This included different kinds of support arrangements such as flexible working, and sources of information such as the occupational health provision. Large organisations often had internal support groups that would help with the exploration and with confidence building. At the end of the day, taking on a new job should be seen as entering a long term working relationship, and new graduates were advised to talk with

their line manager and teammates, finding out who was who, alongside keeping up with changes in the technical field (e1313n028).

4.7.6 HE responsibilities

Three participants had advice for HE institutions, partly in advising line managers of placement students and partly in preparing disabled students to understand and articulate their own support needs. Line manager support was requested at the appointment stage of recruitment; internal line managers wanted to know what support was available to them as someone supporting a disabled student or staff member, as the disabled person was informed and supported but not always the line manager (e1313n004). Another line manager request was information about placement students' course content, so that suitable tasks could be assigned that would build on and develop skills learned at university (e1313n029).

One senior management participant was adamant that HE needed to prepare all graduates to be confident with their abilities. Those with disability also needed to be able to “say who they are, be comfortable with the conversation” (e1313n026). They also needed a chance to explore and develop their own self-awareness, “learning there are certain things you won’t be able to do [easily] so you need to work out how you can do those things, get involved in a different way, learn to deal with it” (e1313n026). Students needed their institutions to give them confidence, to help them find their own ways of working. Another participant recommended that “telling students [that extensive assistive technology] exists will help them with confidence and ... [to] articulate their needs and suitable accommodations” (e1313n020).

4.7.7 Conclusion

The consensus seemed to be that disability could be, and in some cases was, well supported in the workplace, and that applicants needed to be open and honest about what support would help them do their work. Applicants needed to be self-aware and see their differences as strengths. For example, a person with dyslexia might not be able to spell, but can often see the connections between disparate ideas more readily than can their non-dyslexic colleagues, and this makes them good problem-solvers. It was also

apparent that disability support was stronger in large organisations with a lot of resources than in smaller organisations with more limited scope.

4.8 Supporting the job search

Previous conference activity had discussed student disability and employability with placement and employment support professionals and with academic tutors. The annual conference of the National Association of Disability Practitioners (NADP) provided the opportunity to seek the views of disability support professionals in 2014. The conference theme was “Complexity in disability support” and the workshop was entitled “Supporting disabled student empowerment toward employment”.

The main concerns of any student seeking employment were seen as (1) to get the interview, (2) to get the job, and (3) to keep the job. To illustrate the support given to disabled students on this journey at DMU, the support model shown in Figure 4.9 was

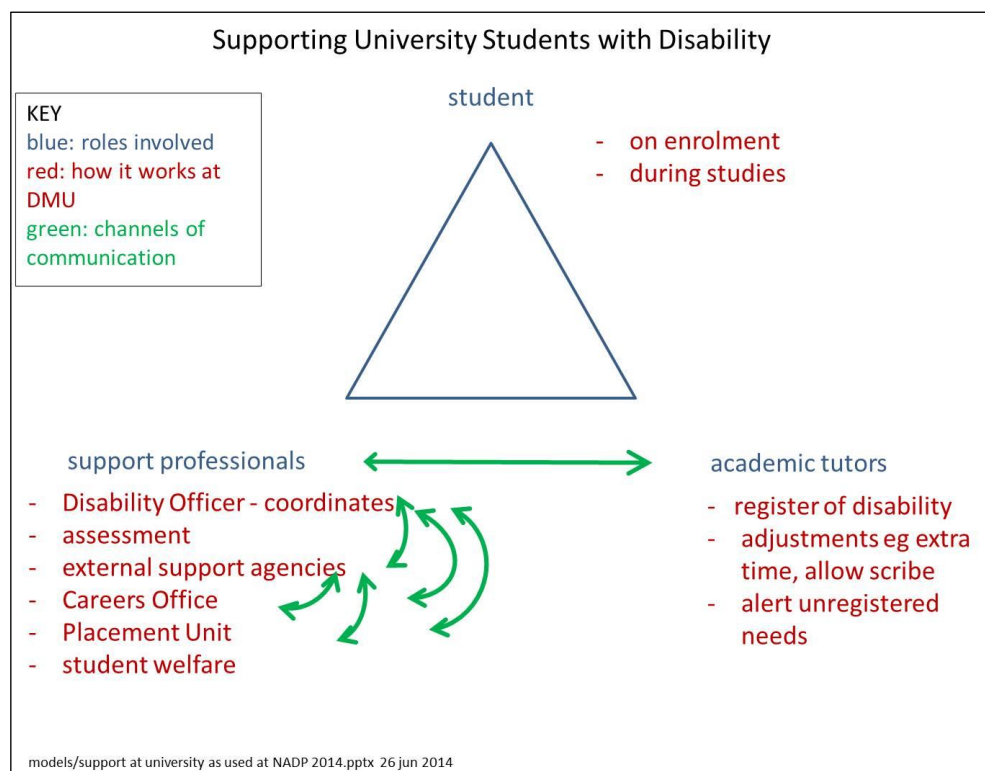


Figure 4.9 Model of student support at DMU

drawn, outlining the various forms of support given and the people providing the support.

In the model, complexity was represented as arrows of communication between the various support parties. This support model was derived from the Model of student development at DMU, seen in Figure 4.1, by expanding the box labelled 'University's support mechanisms'. Not restricted to disability support, the university's support mechanisms also included careers support through the Careers Office and the Placement Unit, and financial and other aspects of student welfare through the Student Welfare Office. The model in Figure 4.9 also highlighted the role of academic tutors in supporting students with disability. The model clarified the availability of support to students both on initial enrolment and throughout their studies; for example many students identify or report learning difficulties some time into their degree programme.

The model in Figure 4.9 was explained to workshop participants as it was drawn, and participants were asked what was done at their universities, and what issues they found.

A wide range of approaches to supporting disabled students into employment emerged. Some courses explicitly linked module teaching and assignments to work-related tasks, for example project specifications in the form of client consultancy briefing documents. Employability skills were sometimes embedded in subject modules and sometimes separated out into employability modules. In some universities, the various support units worked closely together; in others, there was more separation. Placement was compulsory on some courses and optional on others. In a few universities, support professionals were academic tutors and also taught. One participant was a dedicated careers adviser for disabled students. One independent support agency embedded an independence strategy across all support provision, specifically to develop client (student) employability.

Participants felt that there was often some misalignment of student aspirations and abilities. Facets of this included the tendency to treat their skills as entirely separate

rather than holistically as a set of career-related skills that would transfer to the workplace. The workshop highlighted the need for student realism and recognised it as a major barrier.

Disclosure emerged as another issue, echoing discussion in the literature, reported in Section 2.4 Recruitment. Support could guide students and explain the pros and cons, but in the end it is always the student's decision; even the most perceptive supporter can only advise. Participants agreed that large employers understood disability support in all its ramifications, and had the resources to ensure appropriate support was put in place for their applicants and staff, whereas smaller organisations had fewer resources regardless of their level of understanding.

The discussion concluded by highlighting the importance of individual responsibility and emotional resilience; unbeknownst to the group, this echoed similar comments from employer fieldwork.

4.9 Student perspective

Previous attempts to gather the student perspective on disability and employability having foundered, a further exercise consisted of interviews conducted during spring 2014, towards the end of the academic year. The research was mentioned in a number of teaching sessions, and volunteers were invited to take part especially those with disability whether registered or not. Seven semi-structured interviews were held, with students from second year (5) and final year (2); interview questions can be seen in Appendix E. Participants were therefore self-selecting. The timing of the exercise between teaching and the exam season limited any impact on academic relationship between student and tutor.

Interview questions fell into four sections, starting with background questions about the practical support experienced at DMU and expectations of support from future employers. Students valued the support they received and many recognised how it

facilitated their studies. Practical support ranged from wheelchair access to note-taking in class, as set out in Table 4.8.

Support given	Number of students (n=7)
wheelchair access	1
Dictaphone	2
NAS mentor (National Autistic Society)	2
extra time in exams	2
support tutor	3
laptop with dyslexia-related software	3
note-taker in class	3

Table 4.8 Practical support received

4.9.1 Background questions

Three students received a dyslexia support package comprising Dictaphone, laptop with assistive software, support tutor to help with structuring writing, and extra time in exams; not all of them used the whole package. Two students had note-takers in class and mentors from National Autistic Society (NAS). Students were unsure whether employers would provide support, not to the same level at any rate. One student reported they had developed their own confidence and no longer felt the need for support (s1314n006). One articulated an expectation of some employer awareness and perhaps some support, but not much beyond that (f1314n002). Two expected an employer to be willing to support but recognised that cost and other factors might prevent the support arising.

4.9.2 Placement plans

The second interview section explored students' plans or experience of finding and landing a placement job. Responses provided a rather mixed picture. Somewhat surprisingly, actual placement workplace adjustments were limited to adjustable tables, no other accommodations proving necessary. Two students had done placement years, and neither found the need for any practical on-the-job support as there had not been much reading or writing to be done. One wheelchair user found adjustable tables to be

useful, and colleagues helpful in fetching lunch and hot drinks (f1314n001). Of the remaining students, two preferred to concentrate on completing their studies before seeking employment whether placement or permanent. Three students were actively looking for placement jobs, partly through placement unit and partly through their own internet searches. Reflecting on the recruitment process, none had found any hurdles attributed to their disability; technical tests and lack of employer response were mentioned. One student commented there weren't enough jobs to choose from in the geographic area he could reach, although he had not considered trying elsewhere (s1314n002).

4.9.3 Student attitudes to disability disclosure

The third section explored attitudes to disclosure; these varied, with some students choosing to disclose early on and some declining to disclose at all. Those who did not wish to disclose were asked to share any particular concerns. Students who had or would disclose mostly chose to do so at an early stage, usually in a covering letter accompanying their CV or application form. Concerns were expressed that disclosing might affect the application decision; few students had thought about the benefits of disclosing. One student did not feel the disability was relevant to the job and so would not disclose (s1314n006). One student discussed disability at interview only: "at interview, they asked about weaknesses, I said dyslexia can be a weakness but I see it also as a strength. They were intrigued about that; that was the job I got" (f1314n002). Students were asked what if any advice they had sought about disclosure, and where they would look to find it. Three had sought advice, one from the careers advisor and their NAS mentor, and two from the placement unit; most had not asked for advice and were not sure where they would start. One student reported that family advice was not to disclose but the student was uncomfortable with that, and disclosed anyway (s1314n003). Two felt that disclosure was irrelevant in the first place. Additionally in this third section, researchers asked if students were aware of basic legal rights of disabled employees. Few students were, and would find out from a variety of sources for example the placement unit and government websites.

4.9.4 Student development of own employability

The final section of the interview structure explored what students might be doing to improve their chances of finding a job. How would they sell themselves to an employer, what did they see as their strong points? Had they taken part in any non-academic activities during their studies, did they think an employer might be interested? Most had thought about their strong points and what skills and attributes they would bring to their work. Problem solving and relevant experience featured, as well as specific technical skills. Three students mentioned a collection of attributes: hardworking, reflective, dedicated, enthusiastic, getting tasks done. Most had done something outside their studies, for example student societies and volunteering work. Few thought an employer would be interested in extra-curricular activity, although two recognised it might depend on the role.

Participating students had volunteered to take part, and welcomed the chance to discuss issues relating employment questions to disability considerations. Thus there appeared to be appetite for something that would trigger a similar discussion on a more regularised basis than a one-off research project.

4.10 Inclusive transition framework

The employability model that had arisen from the research, as described in Section 4.4 Employability model, formed the basis of a prototype framework. Conference delegates had endorsed the model as a useful aid to exploring employability both with and by individual students. An initial analysis of fieldwork responses yielded some changes to be made to profile elements, for example the addition of passion, problem solving and linking technical knowledge to real world problems. The resultant employability model can be seen in Figure 4.10.

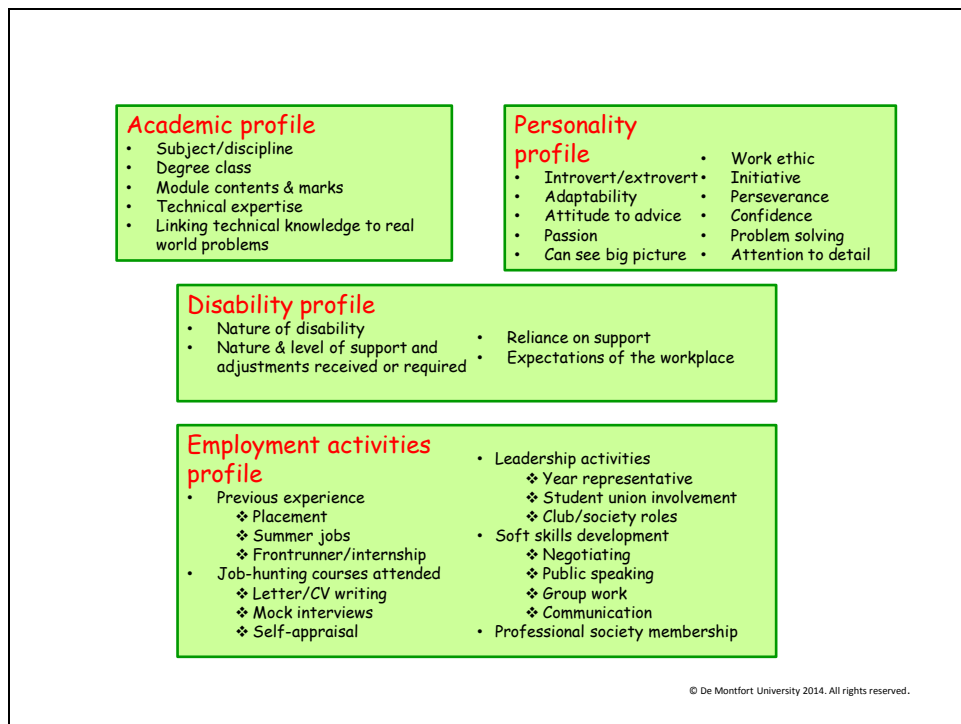


Figure 4.10 Revised employability model

4.10.1 Model development

The first change made to the earlier version of the employability model was to make the disability profile box the same colour as the other profile boxes. This brought the focus away from a student's disability and emphasised that disability is only one aspect of a student's overall profile. Within the **disability profile** itself, 'nature of disability' remained but 'severity' and 'stability' were removed, allowing the student to concentrate on the support aspects and avoiding any tendency to medicalise the disability. 'Expectations of the workplace' remained, so that students could ponder what they did expect.

Within the **academic profile**, 'study mode' was removed as not really relevant to employment, and replaced with a reminder to apply academic knowledge to 'real world problems'; this had been highlighted during the workshop on employability in the curriculum described in Section 4.5 Employability activities built into teaching.

Within the **personality profile**, no aspects were removed. Additional elements were ‘passion’, arising from the literature, and ‘problem-solving’, ‘attention to detail’, and an ability to see the context, ‘see the big picture’, all of which had been mentioned by fieldwork employers when discussing advice they would give to aspiring students.

Within the **employment activities** profile, no changes were found necessary.

4.10.2 Sources of profile elements

The four profiles collected together relevant attributes that contribute to a student’s employability. Where did they come from?

Attributes within the **academic profile** were perhaps the most obvious. As described earlier in Section 4.4 Employability model, the facts of a student’s ‘course of study’, and a graduate’s achievement, form a starting point; this was confirmed by literature and by employer reference to ‘technical skills’. ‘Module contents’ and ‘technical expertise’ were confirmed by fieldwork involving academic tutors and again by employers’ reference to technical skills. ‘Linking technical knowledge to real world problems’ was explicitly mentioned both by academic tutors, as problem solving, and by fieldwork employers, as technical curiosity: “remain forever curious, ask why all the time, certainly with the technical part of the job” (e1313n011). Students understood the importance both of technical skills and of selling themselves on their strengths, as reported in Section 4.9 Student Perspective.

Within the **personality profile**, students also recognised the importance of several characteristics. What students expressed as “hardworking”, “getting the job done” and “dedication” (described in Section 4.9) the literature had discussed as ‘work ethic’ and ‘perseverance’ (described in Section 2.3 Employability); fieldwork employers talked about ‘motivation to work in the field’ and ‘resilience’ (described in Section 4.7 Employer fieldwork). Where students had referred to “reflective”, literature mentioned ‘adaptability’, while fieldwork employers also talked of ‘adaptability’: “attitude is more important than anything else, a willingness to adapt” (e1313n011).

‘Introversion/extroversion’ had been built into the models of employability found in the literature (described in Section 2.5 Employability models) but was not mentioned explicitly by any fieldwork populations. ‘Attitude to advice’ had been suggested by researchers’ own academic experience, and was called “attitude and willingness to learn” by fieldwork employers: “don’t stew over problems, ask someone” (e1313n017). What literature had referred to as ‘passion’, fieldwork employers called “enthusiasm and eagerness” (e1313n013); students had mentioned “being enthusiastic”. ‘Self-confidence’ was seen as an important characteristic in the literature and by fieldwork employers, and confirmed by academic tutors. Students could see that ‘problem solving’ was an important skill; literature confirmed this perception, both as a skill and as something to use for interview examples. Academic tutors had also highlighted the need for this. ‘Initiative’ had occurred to researchers from experience, confirmed by employability models in the literature. The contrasting characteristics of ‘can see the big picture’ and ‘attention to detail’ came partly from researchers’ experience and confirmed by literature in reported employability models.

Within the **disability profile**, the ‘nature of disability’ seemed to be a clear starting point, although more in terms of what kind of accommodations might be needed. This was reflected in the literature, especially in support and guidance given to students (described in Section 2.2 Support for disability), and mentioned by fieldwork employers, in the context of workplace adjustments. The ‘nature and level of support’ was therefore discussed more explicitly by fieldwork employers, although the literature reported many types of support available. By logical extension, ‘reliance on support’ was included in the profile, and had been implied if not explicitly stated by literature or fieldwork; for example, “if you need help, don’t be afraid to ask” (e1313n017). ‘Expectations of the workplace’ featured in employer fieldwork, especially in relation to realistic expectations, and in student fieldwork (described in Section 4.9 Student perspective).

The final profile collected together several **employment-related activities**. ‘Previous experience’, including ‘placement jobs’, ‘work experience’ and ‘summer jobs’ had been

clear from researchers' prior experience in graduate recruitment and in placement tutorship. These types of employment were confirmed by literature, chiefly as part of employability models (described in Section 2.2), and obliquely by a placement employer in the preliminary study: "some of the team are DMU graduates who had been placement students with us" (e1111n001). 'Frontrunner/internship' referred to internal placements, available to students at DMU (described in Section 4.4 Employability model) and was mentioned by fieldwork employers in an HE setting (described in Section 4.7 Employer fieldwork). 'Job-hunting courses' referred to sessions run within the university, helping students to prepare for application success, as described earlier in Section 4.4. 'Leadership activities', including 'year representative', 'student union involvement' and 'club/society roles', had again arisen from researchers' recruitment experience. These activities were also suggested in the literature, as ways a student could develop their own employability (described in Section 2.7 Transition from student to worker). However, students themselves were more sceptical that extra-curricular activity would be relevant, although many had taken part, as discussed in Section 4.9 Student perspective. 'Soft skills' such as 'negotiating', 'public speaking', 'group work', and 'communication', had been evident from researchers' experience, and were confirmed by academic tutors as "team playing" and "2-way communication" described in Section 4.5 Employability activities built into teaching), and again by literature especially in employability models (described in Section 2.5). 'Professional society membership' arose from researchers' own awareness of and involvement in professional bodies, but not echoed loudly in the literature or fieldwork.

4.10.3 Framework development: content

Initial analysis also highlighted much material to augment the model, which thereby evolved into the prototype framework. This extra but related material sat behind the four profiles, giving extra depth to the model. For most profiles there were two sets of supporting material: *skill development activities*, which gave ideas for further self-development, and likely *interview questions*. The interview questions suggested questions a job candidate could expect to be asked at interview, and should therefore be prepared to answer. Perhaps unexpectedly, there were also questions a job candidate

could consider asking the employer, reflecting the fact that an interview is a two-way conversation.

Behind the **academic profile**, *skill development activities* arose from the curriculum support for employability, described in Section 4.5 Employability activities built into teaching, not so much as specific skills or activities but as a more general recognition of the importance of students taking responsibility for their own learning, through for example taking part in coursework, working through lecture materials, and practising skills through examples. Outside the curriculum, students could use self-study books generally available, and suggested through the literature, or they could find a mentor who is expert in the subject matter; the mentor could be a member of staff or someone else, perhaps a family friend. *Questions* to answer and to ask at interview were based largely on researchers' experience in conducting interviews and mock interviews. So, for example, a student on a computer science course might expect to be asked about user testing of newly-developed application systems, or about their experiences in database design. Students might also have technical questions, such as what particular software development tools were in use by the company's IT department; they might also have more general questions about available training, for example.

Behind the **personality profile**, *skill development activities* emphasised that module teaching included development of competences such as team working through group work, and communication skills through giving presentations. Resources such as self-development books were also suggested. Several useful links to relevant websites were given as examples, including sample personality type questionnaires. Employment-related sites often provide resources on self-awareness, and on career awareness and available career options; three of these were also included in the supplementary material. In this profile, suggested *interview questions* probed experience and development of non-technical skills such as presentations and self-organisation; students could consider asking about mentors for example. Here again, some aspects, such as self-development resources, arose from literature while others, particularly

website links, were provided by the faculty careers advisor. Interview questions were based primarily on researcher experience of interviewing students and job applicants.

The **disability profile** was augmented with *self-development activities*, in the form of links to specific advice for students about coping with various learning differences, for example dyslexia; these sets of advice were already available through the university's Disability Support Office and library. Other useful links included websites of organisations dedicated to specific conditions, such as National Autistic Society, and organisations supporting the search for employment, such as the University Challenge 2013 report (Trailblazers, 2013). These links provide support material to help a student understand and explore their condition(s) and perhaps how to work with it. Later, many more useful links were provided by the disability support officer and the careers advisors. *Interview questions* related to disability focused on ways to discuss a need for support in the workplace, designed to instil a matter-of-fact approach rather than a sense of negativity or dread. An interviewer might ask whether there were any ways the workplace could be made easier for the applicant, or they might mention assistive technology as something to be explored. A student could suggest things that supported their study and enquire whether those adjustments might work on the job. A student could also portray their difference as a strength, for example "I'm good at seeing the overall picture, because to get round dyslexia I tend to bring unrelated things together". These questions arose mainly from employer fieldwork as described in Section 4.7 Employer fieldwork, with some questions having been suggested by students during student interviews (described in Section 4.9 Student perspective). The disability profile was also augmented with a link to the communication model described in Section 4.3 Communication model, to give a disability officer or careers advisor the opportunity to discuss the various aspects of communication about disability within the recruitment context.

Behind the **employability profile**, the *skill development activity* link showed the employment activities word diagram (described in Section 4.6 Employability model and measurement), with an encouragement to the student to consider their own activities in

light of skills developed through these extra-curricular activities. The diagram included professional bodies, job applications, work experience, and voluntary service, with example activities for each category. The employment-related *interview questions* a student might expect to be asked included what a student had learned or enjoyed about a leadership role they had held, or what the student had learned on their placement year. Students might ask whether the employer encouraged professional membership. Questions were again suggested by employer fieldwork, particularly from the advice employers would give to student or graduate job applicants.

4.10.4 Framework development: form

The prototype transition framework was a computer-based interactive tool. Taking the employability model described earlier in Section 4.10.1 Model development as its frontispiece, the framework added links to further pages (described above in Section 4.10.3 Framework development: content), in the manner of a website home page, with button-style links to underlying detail and explanatory pages. Figure 4.11 summarises the shape of the prototype, and Appendix H shows it realised as a PowerPoint

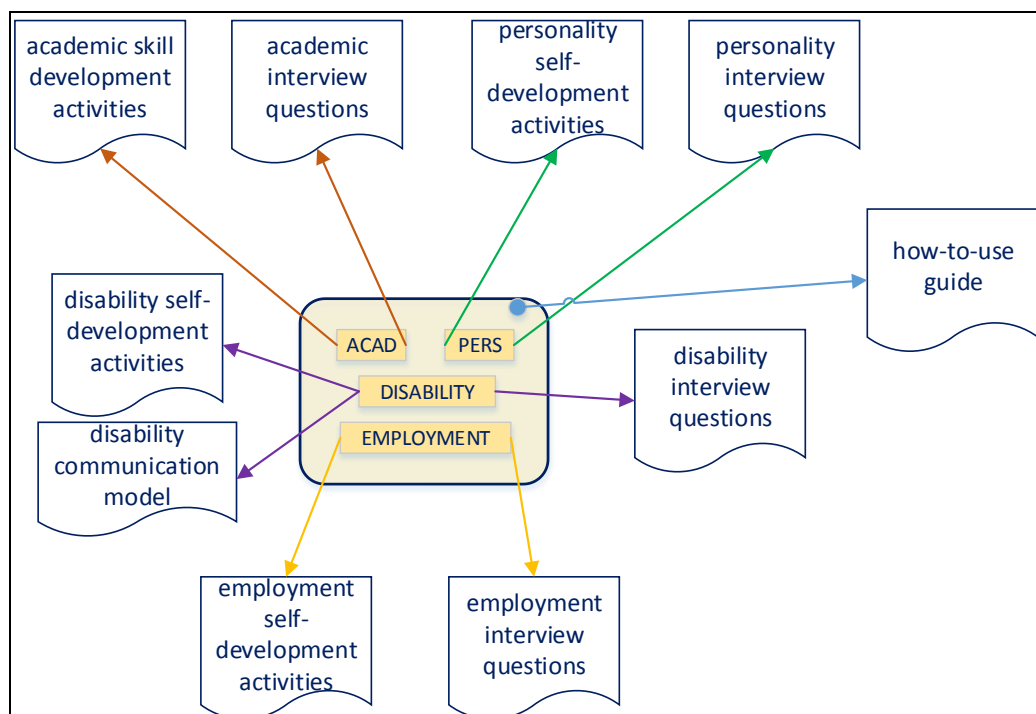


Figure 4.11 Framework schematic diagram

presentation. The prototype might be implemented as a website or as a stand-alone application with links to information on the internet.

The shape for the framework was partially modelled on the IT skills framework SFIA+ (BCS, 2014) and its predecessor Industry Structure Model v3 (BCS, 1999; Clarkson, 2001; Wheatcroft 2007). These depict job roles in the IT industry, grouped into major categories such as system development, information strategy, and business change management. Job roles, or skills, are arranged in typical levels of seniority, and augmented with such detail as tasks and responsibilities, relevant skills, and recommended training and qualifications. Both SFIA+ and the earlier Industry Structure Model use a matrix structure to organise jobs and seniority levels. The original structure model was paper-based, and the reader was directed to separate pages for detailed information about each job and level combination. The current SFIA+ model is an interactive computer-based framework, and the user is able to click on links to drill down to the supporting detail.

The organising principles within the SFIA+ framework thus suggested the structure of the prototype employability framework. The concept of the four profiles – academic, personality, employment activities, and disability – arose from the concept of major job categories within SFIA+, with the profile elements echoing the concept of job roles within SFIA+ categories. The idea of drilling down from each profile to its supplementary material arose from the SFIA+ facility to drill down to each job role's detailed information.

In the prototype, an additional explanation page stated that the framework collated information and material related to finding a job, and outlined how to use the tool. The recommendation was for a support professional (for example disability officer or careers advisor) to use the tool to initiate or illustrate a conversation with an individual student about employment-related aspects of themselves, and to give examples of activities that might help students to develop and enhance their own employability. The student would then be given access to the tool so they could explore aspects of

employability in general, in their particular job market, and in developing their own skills and attributes.

The prototype framework was designed to support all students whether disabled or not, with a working title of Inclusive Transition Framework. This rather unwieldy title was one of the aspects for further development.

4.10.5 Framework pilot

The prototype framework was demonstrated to the faculty's Disability Coordinator, who confirmed that the framework would support the discussion about employment, not just with disabled students as originally envisaged, but with all students. Some minor amendments to the disability profile were suggested, and several links to useful websites were provided, such as Access to Work and further links to National Autistic Society (NAS). It was agreed that the first use of the framework should be on a one-to-one basis with a support professional. The framework would definitely aid the discussion around student aspirations, how to find a job and so on. This discussion did not have to be with a disability support officer but could equally well start with a placement or careers advisor.

Further demonstrations of the framework, to the faculty Careers Advisor, confirmed its applicability to all students, and it was again enthusiastically welcomed. The Careers Advisor confirmed that discussion should start with a one-to-one session with the student, particularly those not already aware of or developing their own employability, before allowing access so the student could explore various ideas presented in the framework. The Careers Advisor suggested several further useful websites and resources, some behind the disability profile, for example links to disclosure advice and examples for different types of learning difficulty, and some behind the personality profile, for example personality profiling sites and opportunity awareness links.

The prototype was piloted by a total of nine students (including one first-year student, one second-year student and 7 final-year students), and one recent graduate. These

participants all volunteered, as a result either of employability-related sessions during the year or the research being mentioned during module classes. The pilot sample was thus self-selecting. Although this could indicate bias, with participants being interested enough to volunteer, many of the pilot students expressed curiosity rather than anything else, welcoming the chance to try out the prototype. The pilot took place after the teaching season, thus minimising any impact on academic relationship between student and tutor.

Students were given a brief introduction to the research, filled in a consent form, and were left to explore the framework unaided and unprompted. A series of survey questions asked what they liked about the tool, what could be different, and what it could be called; the questions are shown in Appendix I. There was ample space given for other comments and observations. Two questions sought opinion on the usefulness of the tool and on the desire to use it to explore career-related awareness and skills, and five questions formed a short impact analysis described below. Responses were analysed using a simple tally sheet, with suggestions and comments being extracted and response counts tallied. Responses to the two opinion questions and the five impact questions were simply tallied as ticked or not.

Responses to the framework were unanimously positive, for example “I wish I’d had this when looking for placement two years ago” from one finalist (t1515n003). All but one student, who had already arranged a graduate job, reported that a tool based on the prototype would be useful to their career development both now and in the future.

The pilot exercise included an informal impact analysis. Two questions asked about any increase in the students’ career awareness and self-awareness, having explored the prototype. Three questions sought responses on the relevance of the framework to their career development, both now and in the future. The analysis thus examined any impact on student awareness, and on likely relevance of the prototype as a career development tool. A near consensus felt that their career awareness or self-awareness had been improved even by the short exploration made in the pilot session. Following their

explorations, all students agreed that the prototype should be developed and implemented as a tool available to students; most agreed that a brief introduction from a careers advisor or similar support professional would be a good way to explain its use and start the student's own exploration, as explained in the information page of the prototype, and that this should happen as early in a study career as possible. One student suggested mentioning it in the enrolment starter pack, alerting students to the existence of the tool and to the need to start thinking about their future careers, in order to make the most of their university years (t1515n008).

Students made many sensible suggestions and comments, identifying both strengths and weaknesses. They particularly liked the framework's ease of use and intuitive navigation, although a few felt the layout could be improved. The separation of employability aspects into four profiles was found to be helpful, guiding students' thinking and allowing them to focus on one type of skill at a time. The links included behind each profile were welcomed both for clarity and for useful information provided. Students highlighted the personality profile as showing how the non-academic skills built into a part of themselves, that those skills were important, and that there are many ways of developing them. Two students singled out the disability profile, recognising that this helps vulnerable students to keep a positive approach and turn their weaknesses into strengths.

The inclusion of sample interview questions was welcomed, perhaps with some surprise as students had not expected to ask questions themselves at interviews. A few students suggested that sample answers could also be included, as guidance rather than scripts. The layout of the prototype was found to be clear, with several students welcoming the pictorial presentation, but many students commented that it could be improved when it turned into a usable tool. In particular, the colour scheme needed to be changed (the piloted version still had the original green colour scheme shown in Figure 4.9), and links from the front page model should be made into standard recognisable buttons. One student pointed out, correctly, that accessibility for assistive technology should be addressed (t1515n006). Further links were requested, to other perhaps more detailed

information. For example, one link showed a lexigram diagram of employability-related extracurricular activities; students would like to see these linked to explanations or relevant volunteering sites for example. Many students suggested including some way of capturing and storing their own notes. One student suggested a forum linked to the tool (probably meaning an on-line forum) to enable students to share their experiences (t1515n002). Asked what the tool could be called – ‘Transition Framework’ being rather dry and uninformative – most students had several suggestions, all of them different, as can be seen in Table 4.9.

title	participant
Building Profile Tool	t1515n002
Career Builder	t1515n005
Careers Information	t1515n005
Development Tool	t1515n002
Employability Guide	t1515n004
EmployHub	t1515n006
Employment Helper	t1515n004
Employment Profile Guideline	t1515n007
In4Your Career	t1515n006
Profile Identifier	t1515n009
Student Employability Plan – helping you achieve your employability goals	t1515n008
Student Profile	t1515n010

Table 4.9 Suggested framework titles

Overall, students interviewed welcomed the tool as providing “one single place to look” for relevant employability-related material (t1515n003). As another commented, “it makes you think what you need for employability” (t1515n004).

4.11 Summary

To summarise, then, research activity comprised fieldwork with students and employers, and conference discussions with support professionals. A model of employability emerged that started to bridge the communication gap, enabling discussion of aspirations and hurdles with individual students. The model evolved into a prototype framework that collated much material and could help students to explore their own employability, both in terms of awareness and in terms of self-development. The prototype was developed with the collaboration of relevant support professionals, and an outline support process was identified. Further work is needed to develop the prototype into a robust tool and implement it for use.

Chapter 5 Discussion

The research set out to investigate student disability and employability, in particular whether the extensive support provided in the academic environment could be expected to continue into the working environment. Several aspects of the research question were explored both in the literature and in practice, through localised fieldwork activity and through conference workshop discussions.

Literature illuminated the distinction between a medical model of disability, in which the disability tends to be seen as a condition of the individual, and a social model of disability, in which disability arises as a result of the individual's environment creating barriers to performance (eg Sayce, 2011; Cooke, 2015). This distinction was echoed by disability support professionals, both individually when considering terminology, and collectively for example in a conference workshop exploring support for disabled students (Section 4.8 Supporting the job search). To some extent, the social model can be seen as implicit in the willingness to make adjustments to teaching provision in education and to working environment in the workplace.

This chapter looks at various aspects of the research question, pulling together findings from literature and from research activity.

5.1 Availability of suitable adjustments in HE

In considering adjustments to the workplace for students who received disability support on their degree course, it was important to identify what support was available in HE, this being the starting point for the student's transition to employment. Support received during studies may naturally become the base line a student uses for comparison and expectation.

The literature reported a well-established and wide variety of supports in HE for physical disabilities and cognitive differences, designed to help all students realise their

academic potential (eg Griffin and Pollack, 2009; Trailblazers, 2010; Burrow et al, 2010; Institute of Physics, 2013; DMU, 2014). Adjustment was made to the physical environment to aid those with physical impairment (eg DMU, 2014) and to both the learning environment and teaching provision to aid those with cognitive difficulties (eg DMU, 2014). Students in fieldwork reported using – and valuing – both physical and cognitive adjustments (Section 4.9 Student perspective). Some of these students reported that they were able to develop their own coping mechanisms and no longer needed to rely on the support.

Disclosure of difficulty triggered an assessment of disability and its impact on a student's study capability; disclosure as a student could be beneficial, as reported in the literature (eg Tinklin et al, 2004; Institute of Physics, 2013). The assessment process culminated in recommended accommodations in support of the individual's studies (eg DMU, 2014; Institute of Physics, 2013) and several sources reported that support did indeed help students who needed it (eg Griffin and Pollack, 2005; Hitchings et al, 2001; Trailblazers, 2013). The initial preliminary study found that the support mechanisms put in place included academic tutors making adjustments to delivery of teaching material, and support professionals advising students and helping them to make the best use of support materials and equipment provided (Section 4.1 Preliminary study and student support).

The wide variety of student support expected from the literature was therefore seen in practice, designed to enable academic progress. Students reported that the support did help them make academic progress.

5.2 Necessity of making accommodations in the workplace

The main research question concerned availability of accommodations in the technical workplace; this assumed a requirement to make accommodations. The literature confirmed the requirement, explaining that support for disability was mandated by the

Equality Act (2010) in all workplaces not just technical ones (eg Disability Alliance, 2011), but only when the need is known. Interviews held during employer fieldwork found an underlying assumption of the rightness to provide reasonable workplace adjustment (Section 4.7 Employer fieldwork), although this assumption may indicate self-selection bias inherent in participants' willingness to take part in the research. Within research activity, the need to accommodate disability in the workplace was built into the communication model, in the inclusion of communications between student applicant and potential employer (Section 4.3 Communication model).

Disclosure of disability or cognitive difficulty was seen in the literature as the gateway to support, but disclosure to an employer was found not to be straightforward, for a variety of reasons often connected with fear of rejection (eg Trailblazers, 2011; Riddell et al, 2010; Green, 2015; Cooke, 2015). Employers recognised the benefits of making accommodations to enable all staff to perform to their potential, and to enable their colleagues to be supportive too (Section 4.7 Employer fieldwork); they also recognised that applicants did not always disclose as early as they might, thus limiting their access to reasonable adjustments.

Literature had pointed out that employers do themselves a disservice if they miss the opportunity to recruit talented people who happen to be disabled (eg Graduate Prospect, 2005; Shaw Trust, 2009). Recently, employers were reportedly becoming aware of the need to be welcoming and positive about disabled people (eg HM Government, 2015b; Cooke, 2015).

The requirement to provide reasonable adjustments in the workplace was clear, once the need for adjustments is known, and employers interviewed clearly understood the requirement. The onus is on the applicant to inform the employer of any such need, and managers understood this too (Section 4.7 Employer fieldwork). In practice, therefore, disclosure was indeed seen as the gateway to support, indicating a potential need for advice to students.

Disabled applicants have legal rights to accommodations, as embodied in the Equality Act (2010) and explained in the literature (eg Disability Alliance, 2011; Business Link, 2012; HM Government, 2015a), although only a few interviewed students were aware of those rights (Section 4.9 Student perspective), indicating potential room for improvement in communication to students.

5.3 Availability of suitable adjustments in technical workplace

Reasonable adjustments have been seen to be available in HE, and the requirement within the workplace has also been established. What, then, was available within the workplace?

A wide range of adjustments available within HE could also be made available in the workplace, with advice and funding often coming from such sources as Access to Work, as reported in the literature (eg Equality Challenge Unit, 2008; Trailblazers, 2013). Adjustments included modifications to diversify physical access arrangements and to provide alternative ways of working, whether with technology support or different procedural practices (eg Business Link, 2012; HM Government, 2015b). Conversations with employers echoed the wide range of adjustments available, including assistive technology, evolving work practices, and architectural adjustments such as lifts and automatic doors (Section 4.7 Employer fieldwork). There was support available to employers during the recruitment process, through the Access to Work programme and the Positive About Disabled People scheme, symbolised by the right to display the Two-Ticks symbol in job advertisements and other promotional materials (Trailblazers, 2013; HM Government, 2015b). However, the availability of support for employers did not guarantee it was taken up in practice (Bacon and Hoque, 2012), nor that it was equally-well understood throughout an organisation (Unger and Kregel, 2003; Section 4.7 Employer fieldwork).

Literature recognised, however, that providing adjustments could be demanding, particularly in small organisations, where resources are limited (eg Shaw Trust, 2009). Employers and disability support officers also recognised this, within small and large organisations, realising that what is readily available in one setting may not be so abundant in another (Sections 4.7 Employer fieldwork, 4.8 Supporting the job search). This seemed to highlight the need for applicants to be canny in their job searches, and to understand their own needs for reasonable adjustment and how that might work in practice – to understand the implications for an employer. Advice from people in one large organisation recommended seeking out those employers who have identified themselves as understanding of disability, for example those displaying the Two-Ticks symbol in their job ads (Section 4.7 Employer fieldwork), alluding to the support available to employers through that channel.

5.4 Student expectations of workplace adjustments

When students seek work, whether for industrial placement, work experience, or permanent employment post-graduation, what adjustments do they expect to be made to the working environment? Several published studies had investigated student perceptions, and many reported that students believed it to be harder for disabled applicants both to get work in the first place and then to obtain suitable adjustments once they started work (eg Trailblazers, 2010; My Plus Consulting, 2012; Green, 2015). Research activities also found this pessimism. The fear of rejection was a big concern and discouraged many students from disclosing their disability to potential employers, as reported not only by students themselves (Sections 4.1 Preliminary study and student support, 4.3 Communications model, 4.9 Student perspective) but also by disability support officers (Section 4.8 Supporting the job search).

Rather than look for adjustments in the workplace, many students intended to do – or had done – in their work what they had found to help in their studies, implying that they had learned or developed their own coping mechanisms while in HE (Hitchings et al,

2001; National Autistic Society, 2012; Institute of Physics, 2013). Students interviewed during this research expected an awareness on the part of employers that disability should be taken into account, but not much else; they expected employers to be willing to help but realised that resources might not be available to carry out those good intentions (Section 4.9 Student perspective). This gloomy picture is rather worrying, and points to a need for better dialogue in order to better inform students. On the other hand, a few students had found that disclosure and workplace adjustments were not always relevant, that it depended on the work being done; they had not come across the need on their own placement assignments (Section 4.9 Student perspective), and this is perhaps encouraging.

Student expectations of available adjustments were therefore at odds with the range of adjustments and support actually available in the workplace. There was much knowledge and provision amongst support practitioners and employers, but this fact was not apparent to students, indicating a need for better communication.

5.5 Lack of a common language

At the outset of the research, there seemed to be confusion about disability and how it was supported in practice. Literature investigations showed no apparent lack of a common language, at least amongst relevant practitioners (educational psychologists, occupational health professionals, disability support officers, voluntary-sector support organisations). Experts were seen to know what each other were talking about. Outside the support professions, however, such clarity seemed rare, and the use of pictorial models to demonstrate especially communication channels proved helpful at every stage of the research. Students and support officers alike valued the use of a semi-pictorial model to aid discussion about employability, disability, and what each implies for the other (Sections 4.1 Preliminary study and student support, 4.3 Communication model, 4.4 Employability model, 4.10 Inclusive transition framework), in part because it

allowed them to see the concepts building in their mind's eye, demonstrating the power of pictures (Mortimore, 2003).

5.6 Guidance for employers

The availability of workplace adjustments that employers could make was clear, but the question remained how employers would locate relevant guidance and advice.

The literature showed that guidance about disability and workplace support was available from UK government agencies such as Access to Work and Business Link (eg Sayce, 2011; Business Link, 2012; Trailblazers, 2013; HM Government, 2015b). Disability support guidelines had been written by groups of employers, for employers, and this lent them credibility within the peer group (Disability Milkround, 2010). Guidelines for employers had also been produced by disability support groups, some in a general context (eg EmployAbility, 2009), some in a specific disorder context (eg National Autistic Society, 2012) and some in a subject grouping context (eg STEM Disability, 2014). In the preliminary study, student support practitioners reported that employer awareness of guidance was somewhat patchy (Section 4.1 Preliminary study and student support). Studies in the literature showed that although larger employers were aware of what guidance and support existed (eg Equality Challenge Unit, 2008), smaller organisations were less aware and found it hard to find the information they knew they needed (eg Sayce, 2011; Leko and Griffin, 2009; Baxter and Glendinning, 2011). A more recent source showed that some employers were becoming both more aware and more disability-confident (My Plus Consulting, 2015), not only understanding and supporting disability but also openly encouraging discussion.

Interviews conducted with employers supported the literature (Section 4.7 Employer fieldwork). In large organisations, especially where there were dedicated experts and departments in HR and occupational health, awareness of disability-related guidance and support was excellent; provision of relevant support was also strong. In smaller

organisations, however, and in isolated parts of large organisations, recruiting managers and line managers were aware of whatever guidance and available support they personally had come across but not much beyond that; smaller organisations had fewer resources to give to support whatever their awareness or understanding (Sections 4.7 Employer fieldwork, 4.8 Supporting the job search).

Where employers would look for guidance and information also depended on where they were situated. In large organisations, people would look to their resident experts in HR, expecting to be directed to occupational health or assistive technology experts if appropriate. In smaller organisations, and individually even in large organisations, managers would seek information from government websites and from internet searches. Managers who were employing placement students would turn to the student's HE institution for information. Fieldwork also pointed out that guidance needed to recognise that the line manager of a disabled person might also need support and guidance, in order to help the disabled staff member to use and develop their job skills (Section 4.7 Employer fieldwork).

Hurdles have been recognised in the recruitment of disabled graduates (eg Equality Challenge Unit, 2008; Shaw Trust, 2009; My Plus Consulting, 2012), and there was guidance specifically for the recruitment process, both generally (eg Business Link, 2012) and through the Two-Ticks scheme (eg Trailblazers, 2013; HM Government, 2015b). Several of the fieldwork managers advised use of the Two-Ticks scheme, and were clearly aware and appreciative of it as a way to tell disabled applicants that their applications would be welcomed. None echoed the note of caution given by Bacon and Hoque (2012) that the scheme requirements were not adhered to uniformly; further research could explore the credibility of such schemes.

5.7 Advice for students

The study found that guidance for managers wishing to recruit and employ disabled people did exist but could be hard to find, particularly the first time one encountered a need for workplace adjustments. Was the picture similar for disabled students seeking employment?

Literature reported that there is good advice for disabled applicants in general (HM Government, 2015a) and from HE in particular (eg Equality Challenge Unit, 2008; Trailblazers, 2013), as well as support organisations who provide guidance to disabled students and graduates (Shaw Trust, 2009; EmployAbility, 2009; Graduate Prospects, 2013; My Plus Consulting, 2012; Trailblazers, 2013). Support professionals within HE confirmed the existence of much student-related guidance, and told their students how and where to look for organisations and advice relevant to themselves (Section 4.8 Supporting the job search). Indeed, students interviewed would turn to their disability and careers support officers to find out where to look (Section 4.9 Student perspective). For those students who did not seek the help of HE support officers, and for academic tutors, awareness of guidance was seen as patchy by HE employment services officers (Section 4.1 Preliminary study and student support), echoing the employers' view that until one needs to use guidance on suitable accommodations for disability, one is unlikely to be aware of any (Section 4.7 Employer fieldwork). This supported the view expressed in the literature that advice and guidance on the recruitment and employment implications of disability do exist but can be hard to find (Leko and Griffin, 2009; Baxter and Glendenning, 2011).

Guidance in the literature encouraged disabled students to be open and honest, to declare the disability and be prepared to explore the options both in recruitment and in employment (Graduate Prospects, 2012; Trailblazers, 2013; Cooke, 2015). Employer interviews strongly endorsed this advice, with several good suggestions for advice to be given to disabled students and graduates (Section 4.7 Employer fieldwork); advice included having confidence, being open and honest, knowing oneself. Many students

did come to know themselves, and to understand their own needs for reasonable adjustments in support of their studies, and project that into their careers, as found by the Institute of Physics (2013); one of the students interviewed in fieldwork said that they had developed their own confidence and did not feel the need for adjustments in the workplace, so would not disclose (Section 4.9 Student perspective). The possibility of unverifiable discrimination in the workplace could not be ruled out. Literature reported the fear of rejection due to disability (eg Trailblazers, 2010; NAS, 2013; Green, 2105); the very existence of anti-discrimination legislation, such as the Equality Act (2010), indicated that discrimination exists. Employer fieldwork echoed this view, and would advise students to recognise the possibility and equip themselves to adapt to circumstances (Section 4.7 Employer fieldwork). Student support professionals could help them learn to articulate their own strengths and to discuss accommodations suited to their needs.

The literature also suggested that an individual's own informal support networks – friends and family for instance – could provide advice and guidance, and signpost an individual to other sources of information (Donnelly et al, 2011). Unfortunately this advice sometimes conflicted with professional support advice; disability support professionals echoed this view to a certain extent (Section 4.8 Supporting the job search), as did one interviewed student, who found family advice conflicting with their own intentions (Section 4.9 Student perspective).

Students themselves welcomed the chance to explore what advice and guidance was available to them. Many would turn to HE support services for disability, careers or placement (Section 4.9 Student perspective). When piloting the prototype transition framework, students appreciated the inclusion of all sorts of guidance via links to other sites (Section 4.10 Inclusive transition framework), as well as the structured and pictorial presentation of so much information. Indeed, mixing visual imagery and small blocks of text, using colour consistently, providing links to further information and examples, all contributed to meeting different learning styles (Mortimore, 2003;

Fleming and Mills, 1992; Pritchard, 2009; Honey and Mumford, 1992), and motivating the exploration of employability.

5.8 Employability and what it means

Taking a definition of employability as “the ability of the individual to operate effectively within their intended jobs market” (Clarkson and Esendal, 2012), and recognising there were many elements to this, exploration of the literature uncovered much evidence of the multi-faceted nature of employability (eg Hillage and Pollard, 1998; Fugate et al, 2004; McQuaid and Lindsay, 2005; Van der Heijde and Van der Heijden, 2006). Elements of employability discussed in the literature covered a broad range of skills and attributes, including both technical skills and personal attributes such as adaptability, confidence and self-determination (Madaus et al, 2008; Cockburn, 2011; National Autistic Society, 2012; Institute of Physics, 2013).

The different elements have been grouped into models of employability in different ways, reflecting the different purposes such as policy-making (Hillage and Pollard, 1998), and supporting mid-career changes (Fugate et al, 2004; McQuaid and Lindsay, 2005; Van der Heijde and Van der Heijden, 2006); Van der Heijde and Van der Heijden focussed on competences rather than skills and attributes, listed in groups rather than the pictorial approach taken by some others. Considering support for students, this research took a student-centred view and identified four profiles: academic, personality, employment activities, and disability; elements included in each profile echoed many of the elements seen in the literature (Sections 4.4 Employability model and 4.10.1 Model development).

Some of the employability elements or aspects were seen as straightforward and could be learned (Hind and Moss, 2011); several studies observed that students could develop employability skills both in their study activities and by themselves individually (eg Hitchings et al, 2001; Hind, 2007; Hind and Moss, 2011). This was borne out in

practice, with academic tutors building transferrable skills relevant in a work setting into teaching sessions and assignments (Section 4.5 Employability activities in teaching), and disability support officers reporting a wide variety of ways employability skills were taught and developed through degree studies (Section 4.8 Supporting the job search). Other academic tutors confirmed that the proposed employability model could help students be confident they were already developing their employability; the bringing together of the four facets of employability was also endorsed as helpful (Section 4.6 Employability model and measurement). Students themselves had some idea of employability skills they had developed, as they reported in interviews. For example, problem-solving and technical skills were seen as strong points on which to sell themselves to prospective employers (Section 4.9 Student perspective). This sample of students also mentioned such attributes as hardworking, reflective and dedicated, as part of what made them valuable to an employer. Interestingly, these students did not see extra-curricular activities as being relevant to employability or worth mentioning to an employer, not realising that many employability skills could be developed and demonstrated outside of studies, for example teamwork and dedication.

The transition framework developed in the course of this research combined the student-centred employability model with links to relevant guidance (Section 4.10 Inclusive transition framework), bringing self-development ideas and sources of information to the students' attention and putting it all together in one place. Both these aspects were welcomed by student support professionals and pilot students alike. Support professionals confirmed it would aid the discussion of students' employment-related concerns, while students felt the framework succeeded in bringing together what they needed to address in their own employability.

5.9 Evaluation of adjustments

An early part of the research question concerned evaluation of suitable accommodations in the workplace. Could an evaluation model be built that would be helpful to those needing to justify the expense?

Discussion of evaluation in the literature focussed partly on evaluating the effectiveness of reasonable adjustments, ie whether they help, and partly on any need to reassess adjustments already in place. Accommodations made were indeed seen to help, both in HE, helping students to realise their academic potential (eg Griffin and Pollack, 2005; Hitchings et al, 2001; Trailblazers, 2013) and in the workplace, allowing people to perform to their best on the job (eg Madaus et al, 2003; Westmorland et al, 2005; Unger and Kregel, 2005; Hendricks, 2010). Success of accommodation was seen to be linked to how well the support package met the needs, skills and aspirations of the individual (eg Donnelly et al, 2010). In practice, fieldwork among employers found that in large organisations it was possible to evaluate adjustments overall to some extent, within occupation health and assistive technology teams for example, but that the more immediate concern was assessing and making adjustments at the individual level, and ensuring that adjustments did help people complete their work tasks (Section 4.7 Employer fieldwork). Within the same organisation providing internal support for disabled staff, one line manager used advice from external sources, such as government websites, to validate the internal support given.

The literature also discussed evaluation in terms of evolving the adjustments made for any individual, taking into account changes in job role and/or changes in the individual's circumstances, which implies some form of evaluation or re-assessment of need (eg Hagner and Cooney, 2003; Hendricks, 2010). Indeed, some sources, including the Equality Act (2010) itself, explicitly recommended that adjustments be reassessed if the individual's circumstances change (HM Government, 2010; Disability Alliance, 2011; DMU, 2014). Again this was borne out in practice, with accommodations being altered if the needs changed, both in HE (Sections 4.1 Preliminary study and student

support, 4.8 Supporting the job search) and in the workplace (Section 4.7 Employer fieldwork). In some cases, adjustments made for individuals were reviewed regularly as an explicit part of the annual performance review; in other cases, adjustments were reviewed only when the need did change.

The evaluation model that had been considered was not pursued, as evaluation seemed to be happening already where appropriate, and because support for student dialogue was seen as the more pressing need. This view echoes Connor's observation that too little of research findings actually filtered through to the practice of learning disability support. The imperative was to unlock research recommendations and make them happen (Connor et al, 2011).

5.10 Measurement of employability

Helping students to improve their employability led to a consideration of measuring employability and using the metric(s) to track their improvement.

The literature reported that measuring employability was tricky and complex, as it comprised so many different aspects (Hillage and Pollard, 1998). Van der Heijde and Van der Heijden (2006) proposed a multi-dimensional instrument to measure employability; Rothwell developed an instrument to measure students' self-perceived employability (Rothwell and Arnold, 2007; Rothwell et al, 2008; Rothwell et al, 2009). Some attempts had been made to measure the impact of disability on career choices (Hitchings et al, 2001); other attempts had been made to analyse the impact of disability severity but not to measure it (Riddell et al, 2010; McMullin and Shuey, 2006). Measurement must be treated with great caution, however, and be balanced with other types of observation (Miller et al, 2002; Meservy, 2011).

In practice, measuring employability, or even single elements of it, would not help the student to know what or how to develop in themselves. To some extent, measurement of

employability was implicit in the assessment of transferable skills during module teaching reported by academic tutors (Section 4.5 Employability in teaching activity). Perhaps this was as far as measurement should go; assigning a numerical index to a student's employability would result in many students focusing on the number and ignoring the more important question of what to develop in themselves and how to develop it (Section 4.6 Employability model and measurement). Nor would an employability index help students to know where or how to apply for jobs.

5.11 Employer expectations of student self-awareness

If there is to be a dialogue between student or graduate applicant and prospective employer about reasonable workplace adjustments, then there is an expectation that the applicant is self-aware and knows their own needs. In the literature, there was an implicit, largely unstated, assumption that a person disclosing a disability might have some knowledge of what might help (Disability Alliance, 2011). Students were encouraged to be open and honest about their disability and to have some knowledge of what adjustments have helped in the past and might help in the future (eg Graduate Prospects, 2012; Trailblazers, 2013; Cooke, 2015). Employers did try to encourage openness from students, and were working to become more disability-friendly (Cooke, 2015).

In practice, employers interviewed in both large and small organisations did expect students to know themselves (Section 4.7 Employer fieldwork). Recruiting managers expected applicants to suggest accommodations needed to facilitate an interview. At the interview, applicants were expected to discuss arrangements that might be needed to carry out the work; managers expected individuals to understand and articulate their own needs. Employers had a lot of good advice that should be passed on to students: to know yourself, be realistic, be open and honest and frank. Students should be advised to explore available support arrangements, which could include organisational practices such as flexible working or doing things in different ways, as well as assistive

technology and physical access adjustments. Students should realise the importance of taking individual responsibility and of resilience; this was advised not only by employers in fieldwork but also by disability support officers (Sections 4.7 Employer fieldwork, 4.8 Supporting the job search). The advice could usefully be built into the emerging transition framework.

5.12 Evolving HE support for students

The research investigated several aspects of the student transition from classroom to workplace, from student to professional, especially for students with disability. The aim was to recommend ways to evolve support given to students in HE, to help them in that transition.

The literature confirmed that disability assessment led to a variety of support arrangements appropriate to the individual (eg Institute of Physics, 2013; Trailblazers, 2013; DMU, 2014); if circumstances changed, a reassessment of need could lead to changes in the support arrangement. Student support was provided by support professionals: disability support practitioners, careers advisors, placement unit officers (eg DMU, 2014). Academic tutors were also part of the support team, making recommended accommodations within teaching delivery; teaching staff sometimes needed guidance in doing this (Neubert, 2002; Burrow et al, 2010). Support professionals were seen to have key roles in developing students in the transition from HE to workplace (Donnelly et al, 2010; Grove and Giraud-Saunders, 2008). In practice, students interviewed would indeed look to their support professionals for advice about employment and disclosure of disability (Section 4.9 Student perspective). To help these people in supporting disabled students, continuous professional development and guidance on current information was seen as necessary (Equality Challenge Unit, 2008; Burrow et al, 2010), as were strong links between the various HE departments, academics and support teams. Indeed, although support teams did work together to a

large extent in some universities, this was not the case everywhere, as reported by disability support practitioners (Section 4.8 Supporting the job search) and by placement unit professionals (Section 4.1 Preliminary study and student support), and stronger links could be encouraged.

The literature reported that students could be guided as they learned what works for them (Institute of Physics, 2013); indeed, students needed help in managing their expectations and aspirations and to stay realistic (Scurry and Blenkinsopp, 2011). Conference discussions with support professionals and fieldwork interviews with employers all confirmed the need to manage student aspirations, to help them understand the different perspectives, to align student aspirations and reality (Sections 4.4 Employability model, 4.7 Employer fieldwork, 4.8 Supporting the job search), noting however that advisors within HE, whatever their role, could only advise students, who would make their own decisions. Here again, it was important to be aware that students have their own informal networks and may heed that advice even if it conflicts with the professionals' advice (Donnelly et al, 2010).

The literature also reported that students needed the chance to develop career development skills (eg Morningstar, 1997; Hitchings et al, 2001) and self-confidence (Klassen, 2008). In many cases in the field, students were seen as already developing many of those employability-related skills in their studies, as confirmed by academic tutors (Sections 4.5 Employability activities in teaching, 4.6 Employability model and measurement), although not necessarily aware of the fact. The proposed employability model and emerging transition framework would make it clear that employability skills were already being developed during teaching activity (Sections 4.4 Employability model, 4.10 Inclusive transition framework).

The evolution to HE support, then, arose in the proposed use of the transition framework as an aid to trigger and drive a discussion about employability, taking into account the impact of any disability a student may have. The discussion could involve any of a careers advisor, placement unit officer, or disability practitioner, as appropriate,

working with the student on a one-to-one basis to start with. Following the initial discussion, the student would be given access to explore the guidance available at their own pace and as it became appropriate during their studies. This proposed evolution in support was welcomed by pilot participants, both support professionals and students, who saw it as a potential enabler of both understanding, self-awareness and self-development (Section 4.10 Inclusive transition framework), and would help them develop their growing independence. The student would be encouraged to set their own employability goals, try some of the suggested activities, and assess their own growth towards employment readiness.

The research culminated in an application that unlocked information and guidance about workplace adjustments and about employability, and made that knowledge accessible to those who needed it: students, support professionals, tutors. The aim was to help all students in their journey from HE to the workplace. Further, it would help those with disability to be ready and able to understand their own needs for workplace support and articulate those needs, both to potential employers during recruitment and to work colleagues when they got there. The inclusive transition framework had been seen to aid that communication and self-development, informing practice with this and published research findings.

Chapter 6 Conclusions

The overarching research question wondered whether, in accommodating student disability within the learning environment, HE institutions were preparing students for the world of work. From this small study based in one institution, the answer appeared to be “Yes, to some extent.” Much good work was being done around the students’ transition to the workplace, but more could be done. Echoed by support professionals in other institutions, communication presented some challenges not yet addressed effectively, and should become the main focus of attention.

Much information was found that was designed to guide students, including those with disability, as they sought the jobs they wanted, presented in a variety of formats and channels. It could be a well-kept secret, however; the students’ challenge was in knowing how and where to find relevant information. For employers seeking to attract disabled applicants, or to support applicants who had disability, the study also found much relevant guidance and information, although knowledge of where and how to find it could be challenging especially for smaller organisations. Various support groups of employers and support bodies were found to be working to address the challenges in the employer arena.

From the disabled student’s perspective, communication challenges also included understanding and articulating their own support needs. Self-awareness needed to be developed, and students needed to learn how to explain and negotiate suitable workplace accommodations. Some of these skills were being developed in teaching and support activities, but not necessarily recognised by students, and not necessarily reaching those who needed it. More could be done to encourage students’ exploration.

Discrimination exists in society, and the possibility of finding it in the workplace cannot be eliminated. This research cannot change the world; it can recommend that students learn to make the best of their circumstances and be adaptable; HE support can help equip them to protect themselves against the possibility of encountering discrimination at work.

Thus, much of the research activity carried out clearly demonstrated the need for a communication mechanism about transition and for an evolution in support provision within an HE setting.

The resultant transition framework includes all students both disabled and non-disabled, aiming to help them understand and maximise their own employability. The profiles within it give a common language for addressing aspects of an individual's career readiness. The inclusion of skill development and capability enhancement suggestions make the framework a powerful tool for self-development. Evolution in HE support for employability in general, including disabled students, arises from building use of the framework into the ways support professionals work with students. A support professional would introduce the tool to the student, demonstrating what it contains and how to navigate it, and discussing any particular questions or concerns the student might raise. The student would then be able to explore their own employability by accessing the tool in their own way and at their own pace, as they identified aspects for their own self-development. The aim is to encourage student growth in self-awareness and in independence both as learners and as professionals.

Research in the literature, and in discussion with support professionals in this and other universities, did not discover any tools that support employment-related communication in the same way as the proposed framework. Existing employability models were seen to be somewhat flat, being descriptive or explanatory but not suggesting any means of developing the skills and attributes within employability; neither did they appear to be particularly visible to students. There is much advice and training material on employment-related topics such as CV writing and interview skills – most university

careers sites include this type of advice – but little if anything that puts these skills in the wider context of the student's skills profile in the round. The proposed framework combines (i) awareness of what different employability elements mean with (ii) both self-development approaches on the one hand, and suggested ways to articulate support needs to an employer in a recruitment interview on the other hand. Inclusion of both these aspects makes the framework unique.

The proposed framework was designed with the sole aim of aiding communication with students; other employability models seen in the literature were designed to support policy-making or to study employability of experienced workers, in the context of mid-career changes. The deliberate focus on a student-centred view taken by the proposed framework therefore also seems unusual. Guidance was found in the literature about disability and its implications for recruitment and employment, both from the applicant's perspective and from the employer's perspective; the guidance was seen to be valuable and links to it were included in the proposed framework. No other tool was found that embedded disability aspects of employability alongside other aspects relevant to (all) students; the proposed framework is therefore inclusive in a way other tools and guidance were not. It neither highlights, isolates, nor hides disability-related aspects, but shows them as being just another part of a student's profile.

As a model of employability, the proposed framework is also inclusive in the way it presents its contents. The predominantly textual presentation of other employability models could be problematic for students with cognitive learning difficulties, for whom pictorial versions were more likely to be effective. Reactions of pilot participants demonstrated that the immediacy of visual expressions of content could benefit more people than just those known to find blocks of text challenging, allowing all students to use and relate to whatever presentation style they preferred at the time or for that type of material.

The research study was beset with low response rates to fieldwork invitations, particularly from students; this would form a major limitation to the possible

universality of the results. The student-focused fieldwork has been carried out within one faculty of one university, and may not necessarily transfer to other faculties with different subject areas and so potentially different employability skills, even within the same university; it may or may not transfer to other universities with potentially different mixes of disability support needs and provision. Universality was not sought, however, recognising that different institutional contexts would be a major factor in students' transition to work from their institutions. More importantly, elements of the findings may resonate with other situations. Support professionals in other institutions may find aspects of the study to be similar or relevant in their own contexts, and build on the similarities. Without knowledge of different situations, however, this research cannot judge what might be relevant elsewhere, nor in what ways.

Beyond the scope of this research study, the next step in realising the proposed framework is to develop it on a robust platform, in such a way as to facilitate content management by support professionals themselves. The developed framework would be trialled with groups of students and support professionals similar to those who took part in this research. An impact assessment would be carried out as part of the implementation plan, evaluating whether students and support professionals found the framework helpful, and in what ways. Once implemented, the actual impact and effectiveness of evolved HE support provision, including use of the framework, would need to be assessed and evaluated. Other areas of further research would investigate the translation into, for example, other faculties' subject areas and other universities' student body profiles.

Pedagogically, employability is an important part of education and an important outcome of any programme of study, as students start to develop their own careers and grow from student to practitioner. Pragmatically, the proposed transition framework will facilitate students in developing relevant employability aspects of their own individual profiles.

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Appendix A Preliminary study interview questions

Note that this was intended as a student questionnaire but, in the absence of responses, was used as an interview sheet.

The Faculty of Technology is undertaking research to find out about student experiences when seeking employment. At this moment in time we are particularly interested in finding out about disabled students and their experiences in finding placement opportunities.

We would be grateful if you could spend a few minutes completing the following short survey. The information gathered will be anonymous; it will be used to help us understand how best to support students when they are seeking employment. It is important that you answer the questions honestly - remember no one will ever know who you are, as we will not be recording your name with your answers.

When you have finished, please return the questionnaire as detailed on the last page.

1. What is your current year of study? (Tick the one answer that applies to you)

Year 2

Placement year

Final year

2. What is the nature of your disability? (for example: dyslexia, mobility disability, mental health condition, diabetes, epilepsy, vision or hearing impairment)

3. Did/do you intend to undertake a placement during year 3 of your course?

Yes (**Go to Question 5**)

No (**continue to Question 4**)

4. Why did you decide not to carry out the placement year? (Tick the one answer which most applies to you)

Just wanted to finish the Course

I did not think it relevant to me

Too difficult for me to work due to my disability

I already have experience of work

I did not think anyone would give me a job

I was too busy with coursework to look for a placement job

Other Please Specify _____

Thank you for taking part in this survey.

5. Questions 5-10 are about your experience when looking for placement jobs.

How did/do you find out about jobs that were on offer? (Tick all that apply)

Family

People I knew through school or friends

Placement unit

Local job advertising

Through a part-time job

Other students told me about suitable jobs

Other Please Specify _____

6. How often did/do you look for suitable jobs to apply for? (Tick all that apply)

Looked regularly at first but gave up

Every week

Once a month

During holidays only

After I had finished my exams and coursework

Never really searched for jobs

Someone else looked for jobs and told me about them

7. How many jobs did you apply for approximately?

8. How many of these jobs were you interviewed for?

9. Did /will you tell your prospective employers about the support the university provides for you? (Tick the one answer that most applies to you)

They already knew

On CV

At interview

After I got the job

Some of them: some I told when I applied, others I told at interview, others I did not tell

If you select this option, what made you tell some and not others?

Did not disclose Why did you not tell them?

10. Did you get a placement job? (Tick one)

No/Not Yet **Thank you for taking part in this survey.**

Yes **Please continue to Question 11**

- 11. Questions 11-14 are about the placement job that you got**

How did you find this specific job? (Tick the one answer that most applies to you)

Family connections

People I knew through school or friends

Placement unit

Local job advertising

Through a part-time job

Other - please specify _____

12. In what business area was this placement? (Tick the one answer that most applies)

Education (university, school or college)

Charity

Public Sector (Council, hospital, etc)

Private Sector- small business (less than 300 employees)

Private Sector- large business

13. How were you paid? (Tick the one answer that most applies to you)

Directly by the employer

Through a university bursary

Not paid

Other Please Specify _____

14. Did you get any disability support while you were on placement? (Tick one)

No

Yes – what kind of support did you get? _____

Did that support help you to do your job? Yes / No

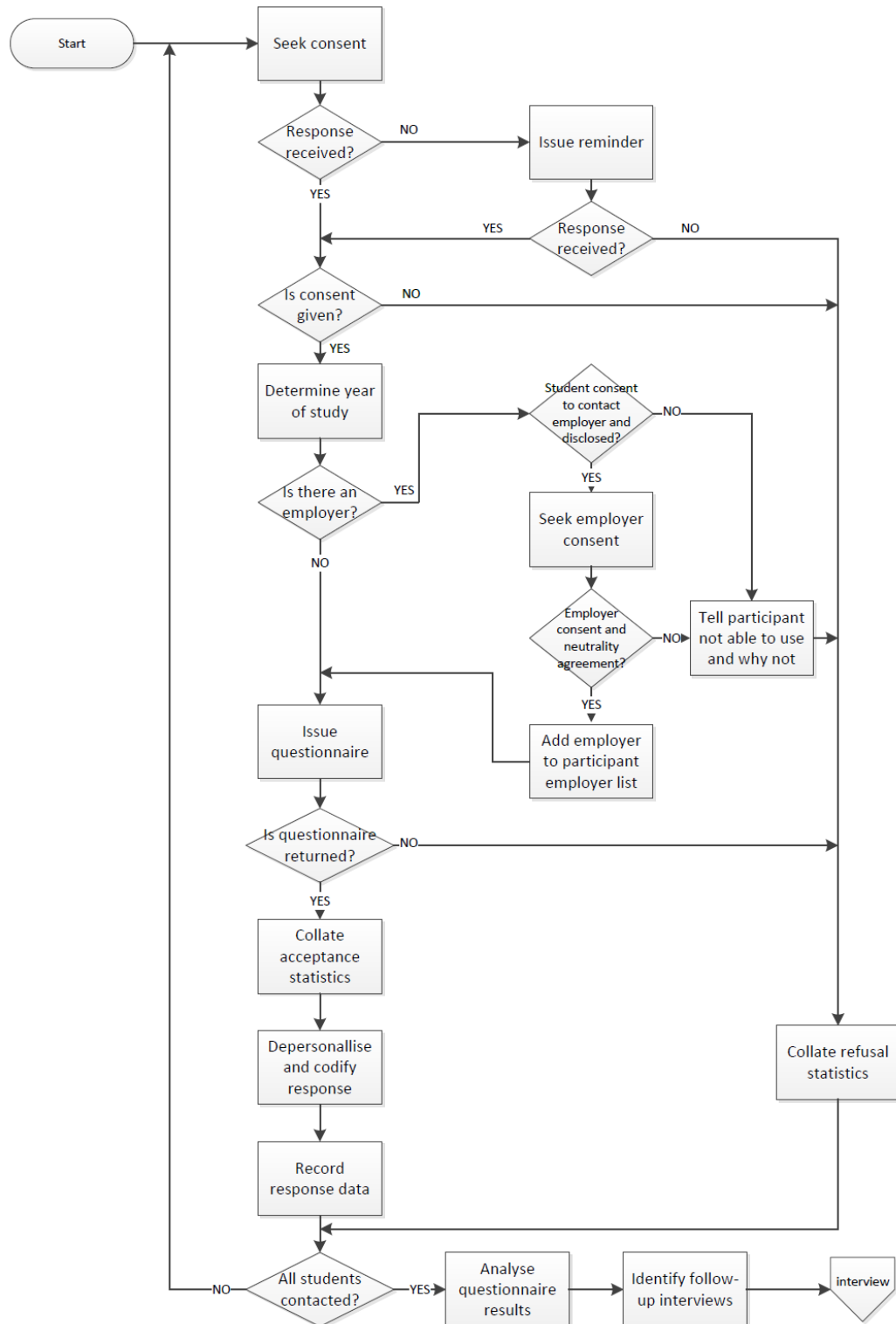
Comments: _____

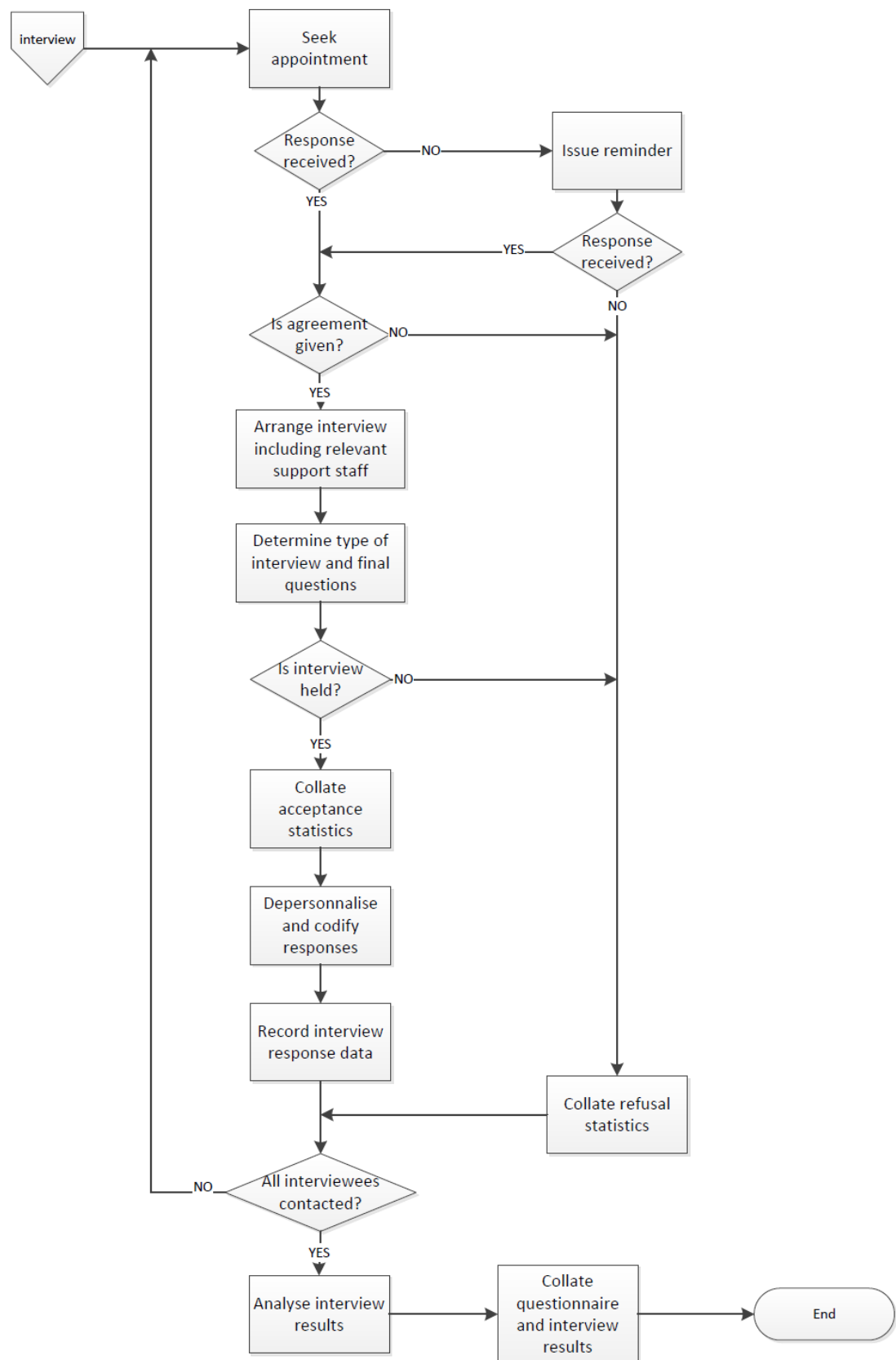
Thank you for taking part in this survey. Please return it to:

Disability Coordinator, Faculty of Technology [FOT Disability Office email address]

Appendix B Placement study 2012-13

B.1 placement survey flowchart





B.2 placement student survey questionnaire

Draft topic list for placement student survey questions (questionnaire)

- Each questionnaire given a unique reference number
- Front sheet with space for name and p number; this will be separated from answers and used solely for administering the survey responses (and this will be explained on the front sheet)
- demographics
 - o course of study (for example Software Engineering)
 - o nature of impairment (for example: dyslexia...)

A1 these questions are about your experience when looking for placement job

How did you search for jobs that were on offer (tick all that apply)

- Family
- People I knew through school or friends
- Placement unit
- Local job advertising
- Through part-time job
- Other students told me about suitable jobs
- Other please specify:

A2 how did you find your placement job? (tick the one that most applies to you)

- Family connections
- People I knew through school or friends
- Placement unit
- Local job advertising
- Through a part-time job
- Another student told me about it
- Other please specify:
-

A3 did you disclose your disability and if so, when? (tick the one that most applies)

- They already knew
- On CV
- At interview
- After I got the job
- Did not disclose; why did you not tell them?

A4 did you expect any (non-financial) support arrangements at your work place to help you do your work?

- No
- Yes please specify:

A5 these questions are about your experience once you had found a placement job

What support arrangements were made to help you do your work?

- None
- Some please describe briefly:

A6 do these support arrangements actually help you do your work?

- Yes
- No what changed or could be changed to help you do your work?

A7 did someone (for example your supervisor, manager, team leader) discuss your support arrangements with you at any time?

- No
- Yes at the beginning
- Yes throughout

A8 in what business area is your placement job? (tick the one that most applies)

- Education (university, school or college)
- Charity
- Public sector (council, hospital, etc)
- Private sector – small business (fewer than 300 employees)
- Private sector – large business

A9 how are you paid? (tick the one that most applies)

- Directly by employer
- Through a university bursary
- Not paid
- Other please specify:

B1 thinking ahead to employment after graduation:

Will you be looking for a job?

- Yes
- No please specify why not and then go to question C1

B2 do you expect your first job to be relevant to you degree studies?

- Yes
- No please say why not

B3 how do you expect to search for a job?

- Family
- People I know through school or friends
- Placement unit
- University careers service
- Local job advertising
- Through part-time job
- Other students will tell me about suitable jobs
- Other please specify:

B4 do you intend to disclose disability?

- Yes it's on my CV
- Yes in the application form
- Yes if they invite me for interview
- Yes at interview
- Yes after I get the job
- Yes at another time please specify when:
- No they already know
- No please specify why not:

B5 what (non-financial) support arrangements do you expect to find in the workplace to help you do your work?

- (do we want to suggest any??)
- Written material in special format
- Note taker

- Wheelchair access
- Different keyboard and/or mouse
- Different screen

B6 how did you find out about the support arrangements you are expecting?

- Same as I get at DMU
- Placement unit
- Faculty Disability Office
- Student services
- Internet please specify:
- Charity relevant to my disability please specify:
- Other please specify:

C1 thank you for completing this questionnaire, your answers will help our research.

Please return the questionnaire to the Faculty Placement Unit:

- Paper copy can be put in the box marked 'Employability Research Questionnaires' in the Faculty Placement Unit, or posted to Technology Placement Unit, Gateway House, De Montfort University, The Gateway, Leicester LE1 9BH
- Electronic copy can be emailed to [FOT placement unit email address]

B.3 placement employer survey questionnaire

Draft topic list for employer survey questions (questionnaire or interviews)

- demographics
 - o size of company
 - o type of employer
 - o sector / industry sector
 - o your role
- placement students / recent graduates
 - o do you often have placement students
 - first time / some years / most years / every year
 - o how does it go
 - o have you often hired recent graduates
 - first time / some years / most years / every year
 - o how does it go
 - o do you often have students or graduates with disabilities (that you are aware of)
 - first time / some years / most years / every year
- recruitment process
 - o what support from DMU for you as employer
 - o what obstacles or hurdles or difficulties for you as employer
 - o what obstacles or hurdles or difficulties for applicants
 - o any suggestions of things to change for DMU
 - o when would you like disclosure of LD
- managing LD students/staff
 - o have you any experience of supporting LD students or staff
 - o what advice/help from DMU for you as employer
 - o what advice/help from anywhere else for you as employer
 - o what advice/help from DMU for student/staff member
 - o what advice/help from anywhere else for student/staff member
 - o what if anything would you do differently another time
- awareness of guidance for employers about LD generally or specific difficulties
 - o if you needed to provide support arrangements for a LD employee
 - how did you find out about it
 - how did you obtain it
 - o what else would help in finding out about guidance
- measurement / evaluation / monitoring
 - o do you (would you) need to do a business case to make support arrangements
 - o what do you measure
 - o what would you like to be able to measure
 - o if you have provided support arrangements for a LD employee
 - how did it help them
 - how did it help you
 - what if anything would you do differently another time
 - what did you monitor
 - how did you monitor
 - how did you decide whether it helped or not

Appendix C Student fieldwork spring 2013

C.1 second year student survey questionnaire

This Survey will be used for a Research Project on Student Disability and Employability

The main objectives of the research are to find out:

Your expectations of workplace support from industrial placement and from employment after graduation

Your experience of the placement recruitment process and guidance given

The data gathered may be used for further related research using similar objectives.

This research project has been approved by the university, and any information you provide will be kept completely confidential and anonymous. You also have the right to withdraw from this research project at any time.

Please sign and date below to show that you have understood the objectives of the research project and to show that you have agreed to participate:

Name

.....

P Number P.....

Participant Signature

.....

Date

This sheet will be kept separate from your responses, and will only be used if we wish to contact you in the future, or you choose to withdraw your participation.

All responses will be treated as anonymous

This page is left blank intentionally.

Second year student survey

All responses will be treated as anonymous

- What course do you study: _____
- What is the nature of your disability

What are your plans for doing industrial placement next year? *Please tick the option that applies*

- ☐ Decided against placement – go to Section A
- ☐ Looked but could not find a placement – go to Section B
- ☐ I want to do placement and I am still looking - go to Section C
- ☐ I am going to do placement and I have a job lined up - go to Section D

Section A - Decided against placement; going straight to final year

A1 – Please say why you decided not to do placement *Tick all that apply*

- ☐ Just want to finish the course
 - ☐ Do not think it relevant to me
 - ☐ Anxious/hesitant due to my disability
 - ☐ Already have experience of work
 - ☐ Do not think anyone would give me a job
 - ☐ Too busy with coursework to look for placement
 - ☐ Other please specify:
-

Please go to Section Z

Section B – Looked but could not find placement

B1 How did you search for jobs? *Tick all that apply*

- ☐ Family
- ☐ People I knew through school/University or friends/students
- ☐ Placement unit
- ☐ Local job advertising
- ☐ Through part-time job
- ☐ Other - please specify:

B2 How often did you look for suitable jobs? *Tick all that apply*

- ☐ Every week
- ☐ Once a month
- ☐ Once a term
- ☐ During holidays only
- ☐ After exams and assignments finished
- ☐ Someone else looked for jobs and told me about them

B3 How many jobs did you apply for approximately?

B4 Did you have to turn any job offers down?

Yes/No

B5 If yes, why?

B6 How many of these jobs were you interviewed for?

B7 Did you disclose your disability, and any support that might entail, to your potential employer? *Tick the one answer that most applies to you*

- ☐ They already knew
- ☐ On CV or application
- ☐ At interview
- ☐ It varied: some I told when I applied, others I told at interview, others I did not tell at all - what made you tell some and not others?

- ☐ Did not disclose; why not?

Please go to Section Z

Section C – Still looking for a placement

C1 How do you search for jobs that are on offer? *Tick all that apply*

- ☐ Family
- ☐ People I knew through school/University or friends/students
- ☐ Placement unit
- ☐ Local job advertising
- ☐ Through part-time job
- ☐ Other please specify:

C2 How often do you look for suitable jobs? *Tick all that apply*

- ☐ Every week
- ☐ Once a month
- ☐ Once a term
- ☐ During holidays only
- ☐ After exams and assignments finished
- ☐ Someone else is looking for jobs and tells me about them

C3 How many jobs have you applied for so far approximately?

C4 How many of these jobs have you been interviewed for?

C5 Did you have to turn any job offers down?

Yes/No

Please go on to the next page ...

C6 If yes, why?

C7 Do you tell your prospective employers about the support the university provides for you? *Tick the one answer that most applies to you*

- ☐ They already know
- ☐ On CV or application
- ☐ At interview
- ☐ Not yet; will do so after I get the job
- ☐ It varies: some I tell when I apply, others I tell at interview, others I do not tell at all
 - ☐ What makes you tell some and not others?

- ☐ Do not disclose; why not?

C8 Do you expect any practical (non-financial) support arrangements at your work place to help you do your work?

- ☐ No
- ☐ Yes please specify:

Please go to Section Z

Section D – Got a placement

D1 How did you find your placement job? *Tick the one that most applies to you*

- ☐ Family connections
 - ☐ People I knew through school/University or friends/students
 - ☐ Placement unit
 - ☐ Local job advertising
 - ☐ Through a part-time job
 - ☐ Another student told me about it
 - ☐ Other please specify:
-

D2 Did you disclose your disability and if so, when? *Tick the one that most applies*

- ☐ They already knew
 - ☐ On CV
 - ☐ At interview
 - ☐ After I got the job
 - ☐ Did not disclose; why not?
-

D3 Do you expect any practical (non-financial) support arrangements at your work place to help you do your work?

- ☐ No
 - ☐ Yes please specify:
-

D4 Did someone (for example your supervisor, manager, team leader) discuss your support arrangements (perhaps as reasonable adjustments) with you at any time?

- ☐ No
- ☐ Yes

Please go on to the next page ...

D5 How did you find out about the support arrangements (or reasonable adjustments) you are expecting? *Tick all that apply*

- ☐ From the employer
- ☐ Placement unit
- ☐ Faculty Disability Office
- ☐ Student Services
- ☐ Internet - please specify:

- ☐ Charity relevant to my disability - please specify:

- ☐ Other please specify:

D6 In what business area is your placement job? *Tick the one that most applies*

- ☐ Education (university, school or college)
- ☐ Charity
- ☐ Public sector (council, hospital, etc)
- ☐ Private sector – small business (fewer than 300 employees)
- ☐ Private sector – large business

D7 How will you be paid? *Tick the one that most applies*

- ☐ Directly by employer
- ☐ Through a university bursary
- ☐ Not paid
- ☐ Other please specify:

Please go to Section Z

Section Z

Thank you for completing this questionnaire, your answers will help our research.

We may need to follow up this questionnaire with an interview.

Would you be willing to take part?

- ☐ Yes
- ☐ No

Please return the questionnaire to the Faculty Disability Office GH0.4b

- Paper copy can be put in the box marked 'Employability Research Questionnaires' in the Faculty Disability Office GH0.4b
- Electronic copy can be emailed to FOTDisability@dmu.ac.uk

C.2 final year student survey questionnaire

Final Year Survey 2012-13

The aim of this page is to inform you about the survey you are about to complete. The survey will be used for a research project on student disability and employability.

The main objectives of the research are to find out:

- how your expectations of workplace support compared with your actual workplace support from industrial placement
- your experience of the placement recruitment process and guidance given
- your expectations of workplace support from employment after graduation

The data gathered will be used for the objectives above and may be used for further related research using similar objectives.

This research project has been approved by the university, and your consent is very important for ethical reasons. Any information which you provide to the research team will be kept completely confidential and anonymous. You also have the right to withdraw from this research project at any time.

Please sign and date below to show that you have understood the objectives of the research project and to show that you have agreed to participate:

Name

P Number P.....

Participant Signature

Date

This sheet will be kept separate from your responses, and will only be used if we wish to contact you in the future, or you choose to withdraw your participation.

All responses will be treated as anonymous

This page has been intentionally left blank

Final year student survey

All responses will be treated as anonymous

- What is your course of study:

- What is the nature of your disability

Did you do a placement year?

- ☐ No – go to Section A
- ☐ Yes – go to Section B

Section A - Did NOT do a placement year

A1 Why did you decide not to do a placement year? *Tick the one that most applies to you*

- ☐ Just wanted to finish the course
 - ☐ Did not think it relevant to me
 - ☐ Too difficult for me to work due to my disability
 - ☐ Already have experience of work
 - ☐ Did not think anyone would give me a job
 - ☐ Too busy with coursework to look for placement
 - ☐ Couldn't find a suitable placement
 - ☐ Other - please specify:
-

Please go to Section C

Section B – Did do a placement year

B1 How did you search for jobs that were on offer *Tick all that apply*

- ☐ Family
 - ☐ People I knew through school or friends
 - ☐ Placement unit
 - ☐ Local job advertising
 - ☐ Through part-time job
 - ☐ Other students told me about suitable jobs
 - ☐ Other - please specify:
-

B2 What worked - how did you find the job you got? *Tick the one that most applies*

- ☐ Family connections
 - ☐ People I knew through school or friends
 - ☐ Placement unit
 - ☐ Local job advertising
 - ☐ Through a part-time job
 - ☐ Another student told me about it
 - ☐ Other - please specify:
-

B3 Did you disclose your disability and if so, when? *Tick the one that most applies*

- ☐ They already knew
 - ☐ On CV
 - ☐ At interview
 - ☐ After I got the job
 - ☐ Did not disclose - why not?
-

B4 Did you expect any (non-financial) support arrangements at your work place to help you do your work?

- ☐ No
 - ☐ Yes - please specify:
-

Please go on to next page ...

B5 What support arrangements were made to help you do your work?

- ☐ None
 - ☐ Some, please describe briefly:
-

B6 Did these support arrangements actually help you do your work?

- ☐ Yes
- ☐ Not at first but eventually found something that worked
- ☐ Not really – could not find suitable arrangements
- ☐ Not applicable

B7 If support arrangements were made at work, how different were they from those offered by DMU?

B8 Did someone (for example your supervisor, manager, team leader) discuss your support arrangements (perhaps as reasonable adjustments) with you at any time?

- ☐ No
- ☐ Yes, at the beginning
- ☐ Yes, throughout

B9 In what business area was your placement job? *Tick the one that most applies*

- ☐ Education (university, school or college)
- ☐ Charity
- ☐ Public sector (council, hospital, etc)
- ☐ Private sector – small business (fewer than 300 employees)
- ☐ Private sector – large business

B10 How were you paid? *Tick the one that most applies*

- ☐ Directly by employer
 - ☐ Through a university bursary
 - ☐ Not paid
 - ☐ Other please specify:
-

Please go to Section C

Section C - Thinking ahead to employment after graduation

C1 After graduation, what are your plans?

- ☐ Employment – looking for a job – go to Section D
- ☐ Employment – already got a job lined up – go to Section E
- ☐ Other, please specify and then go to Section Z

Please go to Section Z

Section D – looking for a job

D1 Do you expect your first job to be relevant to your degree studies?

- ☐ Yes
 - ☐ No, please say why not
-

D2 How do you intend to search for a job? *Tick all that apply*

- ☐ Family
- ☐ People I know through school or friends
- ☐ Careers Service
- ☐ Local job advertising
- ☐ Through part-time job
- ☐ Other students will tell me about suitable jobs
- ☐ Other please specify:

D3 Do you intend to disclose disability? *Tick all that apply*

- ☐ Yes, it's on my CV
 - ☐ Yes, in the application form
 - ☐ Yes, if they invite me for interview
 - ☐ Yes, at interview
 - ☐ Yes, after I get the job
 - ☐ Yes, at another time - please specify when:
-
- ☐ No, they already know
 - ☐ No - please specify why not:
-

D4 What practical (non-financial) support arrangements do you expect to find in the workplace to help you do your work? *Tick all that apply*

- ☐ Written material in special format
 - ☐ Note taker
 - ☐ Wheelchair access
 - ☐ Different keyboard and/or mouse
 - ☐ Different screen
 - ☐ None
 - ☐ Others, please specify
-

Please go on to next page ...

D5 How did you find out about the support arrangements you are expecting?

- ☐ Same as I get at DMU
 - ☐ Careers Service
 - ☐ Faculty Disability Office
 - ☐ Student services
 - ☐ Internet please specify:
 - ☐ Charity relevant to my disability please specify:
 - ☐ Other - please specify:
-

D6 If you are expecting support arrangements, how different will they be from what you currently receive at DMU?

Please go to Section Z

Section E – Got a job lined up

E1 Is your job relevant to your degree studies?

- ☐ Yes
- ☐ No

E2 How did you find your job? *Tick the one that most applies to you*

- ☐ Family connections
 - ☐ People I knew through school or friends
 - ☐ Careers Service
 - ☐ Local job advertising
 - ☐ Through a part-time job
 - ☐ Another student told me about it
 - ☐ Other - please specify:
-

E3 Did you disclose your disability and if so, when? *Tick the one that most applies*

- ☐ They already knew
 - ☐ On CV
 - ☐ At interview
 - ☐ After I got the job
 - ☐ Did not disclose – please say why not?
-

E4 Do you expect any practical (non-financial) support arrangements at your work place to help you do your work?

- ☐ No
 - ☐ Yes - please specify:
-

E5 Did someone (for example your supervisor, manager, team leader) discuss your support arrangements (perhaps as reasonable adjustments) with you at any time?

- ☐ No
- ☐ Yes

Please go on to the next page ...

E6 How did you find out about the support arrangements (or reasonable adjustments) you are expecting? *Tick all that apply*

- ☐ From the employer
- ☐ Careers Service
- ☐ Faculty Disability Office
- ☐ Student Services
- ☐ Internet - please specify:

- ☐ Charity relevant to my disability - please specify:

- ☐ Other - please specify:

E7 In what business area is your job? *Tick the one that most applies*

- ☐ Education (university, school or college)
- ☐ Charity
- ☐ Public sector (council, hospital, etc)
- ☐ Private sector – small business (fewer than 300 employees)
- ☐ Private sector – large business

E8 – How easy was it to find this job?

- ☐ Not at all easy
- ☐ OK
- ☐ Very easy

Please say what made it so

Please go to Section Z

Section Z

Thank you for completing this questionnaire, your answers will help our research.

We may need to follow up this questionnaire with an interview.

Would you be willing to take part?

- ☐ Yes
- ☐ No

Please return the questionnaire to the Faculty Disability Office GH0.4b

- Paper copy can be put in the box marked 'Employability Research Questionnaires' in the Faculty Disability Office GH0.4b
- Electronic copy can be emailed to FOTDisability@dmu.ac.uk

Appendix D Student fieldwork 2013-14

D.1 second year student survey questionnaire

This Survey will be used for a Research Project on Student Disability and Employability

The main objectives of the research are to find out:

Your expectations of workplace support from industrial placement and from employment after graduation

Your experience of the placement recruitment process and guidance given

The data gathered may be used for further related research using similar objectives.

This research project has been approved by the university, and any information you provide will be kept completely confidential and anonymous. You also have the right to withdraw from this research project at any time.

Please sign and date below to show that you have understood the objectives of the research project and to show that you have agreed to participate:

Name

.....

P Number P.....

Participant Signature

.....

Date

This sheet will be kept separate from your responses, and will only be used if we wish to contact you in the future, or you choose to withdraw your participation.

All responses will be treated as anonymous

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Second year student survey

All responses will be treated as anonymous

- What course do you study: _____
- What is the nature of your disability

What are your plans for doing industrial placement next year? *Please tick the option that applies*

- ☐ Decided against placement – go to Section A
- ☐ Looked but could not find a placement – go to Section B
- ☐ I want to do placement and I am still looking - go to Section C
- ☐ I am going to do placement and I have a job lined up - go to Section D

Section A - Decided against placement; going straight to final year

A1 – Please say why you decided not to do placement *Tick all that apply*

- ☐ Just want to finish the course
- ☐ Do not think it relevant to me
- ☐ Anxious/hesitant due to my disability
- ☐ Already have experience of work
- ☐ Do not think anyone would give me a job
- ☐ Too busy with coursework to look for placement
- ☐ Other please specify:

Please go to Section Z

Section B – Looked but could not find placement

B1 How did you search for jobs? *Tick all that apply*

- ☐ Family
- ☐ People I knew through school/University or friends/students
- ☐ Placement unit
- ☐ Local job advertising
- ☐ Through part-time job
- ☐ Other - please specify:

B2 How often did you look for suitable jobs? *Tick all that apply*

- ☐ Every week
- ☐ Once a month
- ☐ Once a term
- ☐ During holidays only
- ☐ After exams and assignments finished
- ☐ Someone else looked for jobs and told me about them

B3 How many jobs did you apply for approximately?

B4 Did you have to turn any job offers down?

Yes/No

B5 If yes, why?

B6 How many of these jobs were you interviewed for?

Please go on to next page ...

B7 **Did you disclose your disability**, and any support you need, to your potential employer? *Tick the one answer that most applies to you*

- ☐ on my CV
- ☐ in the application form
- ☐ when they invited me for interview
- ☐ at the interview
- ☐ after I get the job
- ☐ at another time - please specify when:

- ☐ Did not disclose; why not?

Please go to Section Z

Section C – Still looking for a placement

C1 **How** do you search for jobs that are on offer? *Tick all that apply*

- ☐ Family
- ☐ People I knew through school/University or friends/students
- ☐ Placement unit
- ☐ Local job advertising
- ☐ Through part-time job
- ☐ Other please specify:

C2 How often do you **look** for suitable jobs? *Tick all that apply*

- ☐ Every week
- ☐ Once a month
- ☐ Once a term
- ☐ During holidays only
- ☐ After exams and assignments finished
- ☐ Someone else is looking for jobs and tells me about them

C3 How many jobs have you **applied for** so far approximately?

C4 How many of these jobs have you been **interviewed for**?

C5 Did you have to turn any job offers down? Yes/No

Please go on to the next page ...

C6 If yes, why?

C7 **Did you disclose your disability**, and any support you need, to your potential employer? *Tick the one answer that most applies to you*

- ☐ on my CV
- ☐ in the application form
- ☐ when they invited me for interview
- ☐ at the interview
- ☐ after I get the job
- ☐ at another time - please specify when:

☐ Do not disclose; why?

C8 Do you **expect any practical (non-financial) support arrangements** at your work place to help you do your work?

- ☐ No
- ☐ Yes please specify:

Please go to Section Z

Section D – Got a placement

D1 **How** did you find your placement job? *Tick the one that most applies to you*

- ☐ Family connections
 - ☐ People I knew through school/University or friends/students
 - ☐ Placement unit
 - ☐ Local job advertising
 - ☐ Through a part-time job
 - ☐ Another student told me about it
 - ☐ Other please specify:
-

D2 **Did you disclose your disability**, and any support you need, to your potential employer? *Tick the one answer that most applies to you*

- ☐ on my CV
 - ☐ in the application form
 - ☐ when they invited me for interview
 - ☐ at the interview
 - ☐ after I got the job
 - ☐ at another time - please specify when:
-

- ☐ Did not disclose; why?
-

D3 Did someone (for example your supervisor, manager, team leader) **discuss any practical (non-financial) support arrangements** with you at any time?

- ☐ No
- ☐ Yes

D4 Do you **expect any support arrangements/reasonable adjustments** at your workplace to help you do your work?

- ☐ No
 - ☐ Yes please specify:
-

Please go on to the next page ...

D5 On whose guidance do you base your expectation of support arrangements? *Tick all that apply*

- ☐ The employer
- ☐ Placement unit
- ☐ Faculty Disability Office
- ☐ Student Services
- ☐ Internet - please specify:

- ☐ Charity relevant to my disability - please specify:

- ☐ Other please specify:

D6 In what **business area** is your placement job? *Tick the one that most applies*

- ☐ Education (university, school or college)
- ☐ Charity
- ☐ Public sector (council, hospital, etc)
- ☐ Private sector – small business (fewer than 300 employees)
- ☐ Private sector – large business

D7 How will you be paid? *Tick the one that most applies*

- ☐ Directly by employer
- ☐ Through a university bursary
- ☐ Not paid
- ☐ Other please specify:

Please go to Section Z

Section Z

Thank you for completing this questionnaire, your answers will help our research.

We may need to follow up this questionnaire with an interview.

Would you be willing to take part?

- ☐ Yes
- ☐ No

To return the questionnaire;

- Paper copy can be put in the box marked 'Employability Research Questionnaires' in the Faculty Disability Office GH0.75
- Electronic copy can be emailed to FOTDisability@dmu.ac.uk

D.2 final year student survey questionnaire

This survey will be used for a research project on student disability and employability.

The main objectives of the research are to find out:

If you had a placement, how your expectations of workplace support compared with your actual workplace support from industrial placement

Your experience of the recruitment process and guidance given

Your expectations of workplace support from employment after graduation

The data gathered may be used for further related research using similar objectives.

This research project has been approved by the university. Any information which you provide will be kept completely confidential and anonymous. You also have the right to withdraw from this research project at any time.

Please sign and date below to show that you have understood the objectives of the research project and to show that you have agreed to participate:

Name

P Number P.....

Participant Signature

.....

Date

This sheet will be kept separate from your responses, and will only be used if we wish to contact you in the future, or you choose to withdraw your participation.

All responses will be treated as anonymous

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Final year student survey

All responses will be treated as anonymous

☐ What course do you study:

☐ What is the nature of your disability

Did you do a placement year?

☐ No – go to Section A

☐ Yes – go to Section B

Section A - Did NOT do a placement year

A1 Why did you decide not to do a placement year? *Tick the one that most applies to you*

- ☐ Just wanted to finish the course
 - ☐ Did not think it relevant to me
 - ☐ Anxious/hesitant due to my disability
 - ☐ Already have experience of work
 - ☐ Did not think anyone would give me a job
 - ☐ Too busy with coursework to look for placement
 - ☐ Couldn't find a suitable placement
 - ☐ Was not offered with my course
 - ☐ Other - please specify:
-

Please go to Section C

Section B – Did do a placement year

B1 **How** did you search for jobs that were on offer *Tick all that apply*

- ☐ Family
 - ☐ People I knew through school/university or friends/students
 - ☐ Placement unit
 - ☐ Local job advertising
 - ☐ Through part-time job
 - ☐ Other - please specify:
-

B2 **What worked** - how did you find the job you got? *Tick the one that most applies*

- ☐ Family connections
 - ☐ People I knew through school/university or friends/students
 - ☐ Placement unit
 - ☐ Local job advertising
 - ☐ Through a part-time job
 - ☐ Other - please specify:
-

B3 **Did you disclose** your disability and if so, when? *Tick the one that most applies*

- ☐ on my CV
 - ☐ in the application form
 - ☐ when they invited me for interview
 - ☐ at the interview
 - ☐ after I get the job
 - ☐ at another time - please specify when:
 - ☐ Did not disclose - please specify why:
-

B4 Did you **expect any (non-financial) support arrangements** at your work place to help you do your work?

- ☐ No
 - ☐ Yes - please specify:
-

Please go on to next page ...

B5 Were support arrangements made to help you do your work?

- ☐ No
 - ☐ Yes (please describe briefly)
-

B6 Did these support arrangements actually help you do your work?

- ☐ Yes
- ☐ Not at first but eventually found something that worked
- ☐ Not really – could not find suitable arrangements
- ☐ Not applicable

Comments (optional)

B7 If support arrangements were made at work, were they different from those offered by DMU?

- ☐ Yes
- ☐ No

B8 If yes, how?

B9 Did someone (for example your supervisor, manager, team leader) discuss your support arrangements with you at any time?

- ☐ No
- ☐ Yes, at the beginning
- ☐ Yes, throughout

B10 In what business area was your placement job? *Tick the one that most applies*

- ☐ Education (university, school or college)
- ☐ Charity
- ☐ Public sector (council, hospital, etc)
- ☐ Private sector – small business (fewer than 300 employees)
- ☐ Private sector – large business

Please go on to next page ...

B11 How were you paid? *Tick the one that most applies*

- ☐ Directly by employer
- ☐ Through a university bursary
- ☐ Not paid
- ☐ Other please specify:

—

Please go to Section C

Section C - Thinking ahead to employment after graduation

C1 After graduation, what are your plans?

- ☐ Employment – looking for a job – go to Section D
- ☐ Employment – already got a job lined up – go to Section E
- ☐ Other, please specify and then go to Section Z

Please go to Section Z

Section D – looking for a job

D1 Do you **expect** your first job to be relevant to your degree?

- ☐ Yes
 - ☐ No, please say why not
-

D2 **How** do you intend to search for a job? *Tick all that apply*

- Family
 - People I know through school/university or friends/students
 - Careers Service
 - Local job advertising
 - Through part-time job
 - Other please specify:
-

D3 When, if at all, would you **expect** to disclose a disability?

- ☐ on my CV
 - ☐ in the application form
 - ☐ when they invited me for interview
 - ☐ at the interview
 - ☐ after I get the job
 - ☐ at another time - please specify when:

 - ☐ Would not disclose - please specify why:

-

D4 When, if at all, would you **prefer** to disclose a disability?

- ☐ on my CV
- ☐ in the application form
- ☐ when they invited me for interview
- ☐ at the interview
- ☐ after I get the job
- ☐ at another time - please specify when:

- ☐ Would not disclose

Please go on to next page ...

D5 In reference to D4 above, why would you prefer to disclose at this point/not to disclose?

D6 What practical (non-financial) support arrangements do you **expect** to find in the workplace to help you do your work? *Tick all that apply*

- ☐ Written material in special format
- ☐ Note taker
- ☐ Wheelchair access
- ☐ Specialised keyboard and/or mouse
- ☐ Specialised screen
- ☐ None
- ☐ Other, please specify

D7 On whose guidance do you base your expectation of support arrangements?

Tick all that apply

- Careers Service
- Faculty Disability Office
- Student services
- Internet please specify: _____
- Charity relevant to my disability please specify: _____

-
- Other - please specify: _____

D8 Do you expect any support arrangements at work to be the same as those received while at DMU?

- Yes
- No

If not, what do you expect to be different?

Please go to Section Z

Section E – Got a job lined up

E1 Is your job relevant to your degree?

- ☐ Yes
- ☐ No

E2 **How** did you find your job? *Tick the one that most applies to you*

- ☐ Family connections
 - ☐ People I knew through school/university or friends/students
 - ☐ Careers Service
 - ☐ Local job advertising
 - ☐ Through a part-time job
 - ☐ Other - please specify:
-

E3 **Did you disclose a disability** and if so, when? *Tick the one that most applies*

- ☐ on my CV
 - ☐ in the application form
 - ☐ when they invited me for interview
 - ☐ at the interview
 - ☐ after I got the job
 - ☐ at another time - please specify when:
-

- ☐ Would not disclose - please specify why:
-

E4 Did someone (for example your supervisor, manager, team leader) **discuss any practical (non-financial) support arrangements** with you at any time?

- ☐ No
- ☐ Yes

E5 Do you **expect any support arrangements** at your work place to help you do your work?

- ☐ No
 - ☐ Yes - please specify:
-

Please go on to the next page ...

E6 On whose guidance do you base your expectation of support arrangements?

Tick all that apply

- ☐ The employer
- ☐ Careers Service
- ☐ Faculty Disability Office
- ☐ Student Services
- ☐ Internet - please specify:

- ☐ Charity relevant to my disability - please specify:

- ☐ Other - please specify:

E7 In **what business area** is your job? *Tick the one that most applies*

- ☐ Education (university, school or college)
- ☐ Charity
- ☐ Public sector (council, hospital, etc)
- ☐ Private sector – small business (fewer than 300 employees)
- ☐ Private sector – large business

E8 – How easy was it to find this job?

- ☐ Not at all easy
- ☐ OK
- ☐ Very easy

Please say what made it so

Please go to Section Z

Section Z

Thank you for completing this questionnaire, your answers will help our research.

We may need to follow up this questionnaire with an interview.

Would you be willing to take part?

- ☐ Yes
- ☐ No

To return the questionnaire:

- ☐ Paper copy can be put in the box marked 'Employability Research Questionnaires' in the Faculty Disability Office GH0.75
- ☐ Electronic copy can be emailed to FOTDisability@dmu.ac.uk

Appendix E Student fieldwork spring 2014

E.1 second year student interview sheet

Intro - [recorder on]

We are a research team within the Faculty, focusing on student disability and employability. You are.....correct? You are a student this year?

Specifically, we are looking into whether our support mechanisms are preparing disabled students for their future careers. Whether, for example, the support you receive from us is realistically attainable throughout your career outside of University. Also, to find out how readily available advice on disclosure is for students. We hope to find ways of making the transition from university to work easier and more effective.

So, we would like to ask you some general questions about practical support you have had here at DMU, move on to your thoughts about placements, explore some things about disclosure, and finally talk about what you might be doing to enhance your own employability. Is that okay with you?

1. Starting with some background things
 - a. what is your registered disability?
 - b. what practical support do you receive from DMU?
 - c. on a scale of 1 to 10, with 1 being no practical support to 10 being fully supported, how well do you think you are being supported here?
no support 1 2 3 4 5 6 7 8 9 10 fully supported
 - what has been the best?
 - what has been the worst?

d. do you expect future employers to provide the same level of support?

yes

no - what do you think might be different at work

2. Thinking about placements ...

a) are you planning to do a placement next year?

○ if yes - have you got a placement organised?

▪ if no, what have you tried, anything yet?

• what hurdles have you found?

○ if not planning a placement - why is that?

▪ do you think that decision will have any impact on your future prospects?

3. Now thinking about disclosure....

a. would you disclose your disability when looking for a job? have you already?

○ yes - at what stage would that be [eg application form, CV, covering letter, at interview]

- no - why not, are there any particular concerns [eg discrimination, not being considered further]
- have you considered the benefits of disclosing? [eg entitled to reasonable adjustments, teammates can be very helpful if they know]

b. have you sought advice about disclosure?

- yes - who did you ask?

did it help?

- no - would you seek advice on disclosure?
 - yes - who from?
 - no - okay, would it help to know who you could ask?
[eg employers, disabled workers, careers advice whether DMU or outside, disability charity, family, friends, tutors, mentors]

c. are you aware of what basic legal rights disabled employees have?

- yes - how did you find out?
- no - would you seek advice on this before applying?
 - yes - where from?

- who do you think should provide this kind of advice?

4. Finally looking at what you might be doing to improve your own chances...

a. how would you sell yourself to an employer, what do you consider to be your strong points?

b. what non-academic activities have you participated in while at DMU?

would an employer be interested, do you think?

5. That's the end of the interview...

[if a lot of time left, pause for further comments]

[stop recording]

6. ...thank you for your time and sharing your thoughts

a. If we transcribe the interview, will you want to see a copy?

b. If we wanted to do any follow-up interviews, might you be willing to take part?

c. Would you like to receive a summary of the research undertaken?

d. here is my card - please do get in touch if you think of anything else or want to ask us anything

E.2 final year student interview sheet

Intro - [recorder on]

We are a research team within the Faculty, focusing on student disability and employability. You are.....correct? You are a student this year?

Specifically, we are looking into whether our support mechanisms are preparing disabled students for their future careers. Whether, for example, the support you receive from us is realistically attainable throughout your career outside of University. Also, to find out how readily available advice on disclosure is for students. We hope to find ways of making the transition from university to work easier and more effective.

So, we would like to ask you some general questions about practical support you have had here at DMU, move on to your thoughts and experiences about placements, explore some things about disclosure, and finally talk about what you might be doing to enhance your own employability. Is that okay with you?

7. Starting with some background things

a. what is your registered disability?

b. what practical support do you receive from DMU?

c. on a scale of 1 to 10, with 1 being no practical support to 10 being fully supported, how well do you think you are being supported here?
no support 1 2 3 4 5 6 7 8 9 10 fully supported

○ what has been the best?

○ what has been the worst?

d. do you expect future employers to provide the same level of support?

- what makes you expect that?

- what do you think might be different at work?

8. Thinking about placements ...

b) did you do a placement last year?

- if yes - what was it

- did you enjoy it
- was it related to your degree
- how did you find it
- did you have any practical support at work
- did you have any practical support outside of work
- what do you feel you gained most from the year
- [go on to question 3]

- if did not do a placement - why was that?
 - if tried and did not get one
 - what did you try
 - what hurdles did you find
 - if didn't look for a placement - why not
 - do you have any other work experience?
 - if yes - did you get any practical support while at work?
 - if no - do you think this will have any impact on your future prospects?

9. Now thinking about disclosure....

a. would you disclose your disability when looking for a job? or maybe you have already?

- yes - at what stage would that be [eg application form, CV, covering letter, at interview]

- no - why not, are there any particular concerns [eg discrimination, not being considered further]

- have you considered the benefits of disclosing? [eg entitled to reasonable adjustments, teammates can be very helpful if they know]

b. have you sought advice about disclosure?

- yes - who did you ask?

- did it help?

- no - would you seek advice on disclosure?

- yes - who from?

- no - okay, would it help to know who you could ask?
eg employers, disabled workers, careers advice
whether DMU or outside, disability charity,
family, friends, tutors, mentors

c. are you aware of what basic legal rights disabled employees have?

- yes - how did you find out?

- no - would you seek advice on this before applying?
 - yes - where from?
 - who do you think should provide this kind of advice?

10. Finally looking at what you might be doing to improve your own chances...

- a. how would you sell yourself to an employer, what do you consider to be your strong points?
- b. what non-academic activities have you participated in while at DMU?
- c. do you think an employer would be interested?

11. That's the end of the interview...

[if a lot of time left, pause for further comments]

[stop recording]

12. ...thank you for your time and sharing your thoughts

- a. If we transcribe the interview, will you want to see a copy?
- b. If we wanted to do any follow-up interviews, might you be willing to take part?
- c. Would you like to receive a summary of the research undertaken?
- d. here is my card - please do get in touch if you think of anything else or want to ask us anything

Appendix F Employability Skills in FOT

Skills on modules – notes from workshop at Learning and Teaching away day Sept 2012

Participants: teaching and other staff in Faculty of Technology

Skill, knowledge, experience	Year 1 - introduce	Year 2 - consolidate	Final year – reinforce (also PG)
2-way communication	Eng: 1- report writing, 2- referencing, 3- citation methods Media: TECH1019 Audio Tech report writing and lab book IMAT1906: presentations and report writing	BSc Comp SW Dev Prj: report writing CTEC2752: discussion-based seminars, writing concise reports Eng: report writing Media: TECH2019 audio tech report writing and lab book	AI: professionalism Project management Eng: report writing, oral presentation, poster Media: Studio Tech: report writing and lab book
Critical thinking	Accountancy: assignment	AI: CTEC2752: seminars based around analysis of a case study IMAT2405: case study	Soft Eng: CTEC3902 rigorous systems Computing etc: IMAT3425 risk management
Problem Solving	Eng: ENG1004: create a prototype from electronic kit; create circuit from software	Media: TECH2019 audio technology design task AI: CTEC2752: assignment around business problem/decision AI IMAT2405: problem solving Computing: SW Dev Proj	Soft Eng: CTEC3902 rigorous systems
creativity	Eng: individual design project; group design project	AI: intro AI and Robotics: creativity	AI: final year project Eng: individual design project
Can-do attitude	Eng: group design project		Eng: individual design project
Team playing	IMAT1906: group work AI: robot club Accountancy: group work Eng: ENG1004 working on group project	Eng: lab groups IMAT2427: group work IMAT2601: change management	Computing etc: IMAT3425 team building and motivation
Time keeping	Eng: attendance; strict application of coursework extension policy	Eng: attendance; strict application of coursework extension policy	Eng: attendance; strict application of coursework extension policy
Honesty / integrity	Eng: experiments and lab reports	Eng: experiments and lab reports	Eng: experiments and lab reports

Skill, knowledge, experience	Year 1 - introduce	Year 2 - consolidate	Final year – reinforce (also PG)
independence		AI: CTEC2752: assignment where each has different topic to work on	Computing etc: IMAT3425: people capability maturity model Eng: individual project
Self confidence			Eng: project presentation
Awareness of suitable opportunities		Computing etc: IMAT2601 organisation culture awareness	
Subject knowledge and skills	Eng: ENG1004 relevant topic of electronics	AI: CTEC2752 security management Computing: OO Programming	Eng: masters courses only; some modules, final thesis Soft Eng: CTEC3902 rigorous systems

Appendix G Employer fieldwork interviews

G.1 placement employer interview sheet

Intro - [recorder on]

We are a research team from DMU, focusing on student disability and employability. You are.....correct? You have been involved with our students/graduates in some way?

Specifically, we are looking into whether our support mechanisms are preparing disabled students for their future careers. Whether, for example, the support they receive from us is realistically attainable through their careers outside of University. Also, to find out how readily available information on disability support is for employers and business owners. We hope to find ways of making the transition from university to work easier and more effective for the employer as well as for the student.

So, we would like to ask you some general questions about your company/division/etc., move on to your experiences with the recruitment process, and finally talk about your experiences when managing students/graduates from DMU. Is that okay with you?

13. Starting with some background things

- a. As a _____, you manage a team of technical people?
- b. How big is your team/area - how many staff are there?
how many of them are students /graduates /both
- c. Is that typical for your industry sector?
- d. [if large organisation] Is that large within the organisation?
- e. [observation: education / health / charity / private sector - which]
- f. how many years have you had placement students?

- g. What has been your involvement for example on a day-to-day basis as their team leader or colleague, or less frequently as their line manager or mentor
- h. Do these placement students/graduates ever have disabilities that you are aware of? [any disabilities, eg physical or things like dyslexia, dyspraxia, autism]

14. Thinking about recruitment ...

- c) When in the recruitment process would you expect a student to disclose any disability they might have? [eg application form, CV, covering letter, at interview] [we'll get on to what they actually do in a minute]
 - why then specifically?
 - would you expect them to suggest any ways the working environment could be adjusted to support them?
- d) when, in your experience, do people actually tend to disclose their disability?
 - [if not the same as above] why do you think people might prefer to disclose at that point in the process?
- e) When a disability is disclosed, what happens as a result - what resources do you have available that help you make any necessary adjustments [to recruitment process and/or workplace on the job]
 - don't know -
 - that's fine, not all organisations do,

- how would you find out what needed to be done to support the individual, who would you ask?
- [know and describe] -
 - is it discussed with the applicant?
 - at what stage?
 - what is your role in the support process?

15. Moving on to your experiences of managing students or graduates once they've been appointed,

- a. Have you had any first-hand experience of having a student or member of staff with a learning difficulty? [eg dyslexia, dyspraxia, autism]
 - no - alright, thinking more generally then.. [and go on to next question]
 - yes -
 - I'd like to ask a few questions about the support if I may - I'm not asking about any specific individuals
 - what kind of learning difficulty was it?
 - what kind of support was given?
 - were there any issues or concerns you had with providing that support? [eg impact on team work, on budgets, on finding information, on approaching someone about support needs or issues, about quality of work?]

b. Do you ever review the workplace support a disabled employee receives?

○ yes -

- When?
- How often?
- Is reviewing a part of the support system that's already in place?

○ no - that's fine, if the initial support works that's great

c. how useful do you find De Montfort University as a resource for support or information on disability?

○ Does the university make its presence known or voice heard?

○ how, if at all, could we as a university be more supporting to you as an employer when a student with a disability is employed [or comes on placement]

d. are you aware of any external support sources for students or staff who are disabled?

○ yes - can you give me an example ?

- do you encourage the use of external support? or do you prefer to support internally? or both?

- no - would you like to be made better aware of external support sources?
 - how would you want this information to be more readily available to you?

16. That's the end of the interview...

[if a lot of time left, pause for further comments]

[stop recording]

17. ...thank you for your time and sharing your insights

- a. If we transcribe the interview, will you want to see a copy?
- b. If we wanted to do any follow-up interviews, might you be willing to take part?
- c. Would you like to receive a summary of the research undertaken?
- d. here is my card - please do get in touch if you think of anything else or want to ask us anything

G.2 placement employer interview sheet – large company

Intro - [recorder on]

We are a research team from DMU, focusing on student disability and employability. You are.....correct? You have been involved with hiring or managing staff, perhaps graduates or placement students, in some way?

Specifically, we are looking into whether disability support mechanisms in higher education are preparing disabled students for their future careers. Whether, for example, the support they receive from us is realistically attainable through their careers outside of University. Also, to find out how readily available information on disability support is for employers and business owners. We hope to find ways of making the transition from university to work easier and more effective for the employer as well as for the student.

So, we would like to ask you some general questions about your department/area/etc., move on to your experiences with the recruitment process, and finally talk about your experiences when managing recent students or graduates. Is that okay with you?

18. Starting with some background things

- a. As a _____, you manage a team of technical people?
- b. How big is your team/area - how many staff are there?
how many of them are students /graduates /both
- c. Is that typical for your industry sector?
- d. [if large organisation] Is that large within the organisation?
- e. [observation: relevant sector]
- f. have you had placement students or recent graduates join your team?
 - no - that's fine, your insights are valuable to our research
[and go on to question 2]

- g. [if they have had any] how many years has that been?
- h. [if they have had any] What has been your involvement for example on a day-to-day basis as their team leader or colleague, or less frequently as their line manager or mentor
- i. Do these placement students/graduates ever have disabilities that you are aware of? [any disabilities, eg physical or things like dyslexia, dyspraxia, autism]

19. Thinking about recruitment ...

- f) When in the recruitment process would you expect a student or graduate to disclose any disability they might have? [eg application form, CV, covering letter, at interview] [we'll get on to what they actually do in a minute]
 - why then specifically?
 - would you expect them to suggest any ways the working environment could be adjusted to support them?
- g) when, in your experience, do people actually tend to disclose their disability?
 - [if not the same as above] why do you think people might prefer to disclose at that point in the process?
- h) When a disability is disclosed, what happens as a result - what resources do you have available that help you make any necessary adjustments [to recruitment process and/or workplace on the job]

- don't know -
 - that's fine, not all organisations do,
 - how would you find out what needed to be done to support the individual, who would you ask?
- [know and describe] -
 - is it discussed with the applicant?
 - at what stage?
 - what is your role in the support process?

20. Moving on to your experiences of managing students or graduates once they've been appointed,

a. Have you had any first-hand experience of having a student or member of staff with a learning difficulty? [eg dyslexia, dyspraxia, autism]

- no - alright, thinking more generally then..
 - what adjustments have you seen or made to the working environment?
 - what disabilities were those adjustments supporting?
- yes -
 - I'd like to ask a few questions about the support if I may - I'm not asking about any specific individuals
 - what kind of learning difficulty was it?
 - what kind of support was given?

- were there any issues or concerns you had with providing that support? [eg impact on team work, on budgets, on finding information, on approaching someone about support needs or issues, about quality of work?]
- b. Do you ever review the workplace support a disabled employee receives?
- yes -
 - When?
 - How often?
 - Is reviewing a part of the support system that's already in place?
 - no - that's fine, if the initial support works that's great
- c. how useful do you find De Montfort or any University as a resource for support or information on disability?
- Does the university make its presence known or voice heard?
 - how, if at all, could we as a university be more supporting to you as an employer when a student or graduate with a disability is employed [or comes on placement]

- what advice would you give a disabled student or graduate trying to find a job in your field?
- what advice would you give them on settling into the workplace?
- d. are you aware of any external support sources for students or staff who are disabled?
 - yes - can you give me an example ?
 - do you encourage the use of external support? or do you prefer to support internally? or both?
 - no - would you like to be made better aware of external support sources?
 - how would you want this information to be more readily available to you?

21. That's the end of the interview...

[if a lot of time left, pause for further comments]

[stop recording]

22. ...thank you for your time and sharing your insights







- a. If we transcribe the interview, will you want to see a copy?
- b. If we wanted to do any follow-up interviews, might you be willing to take part?
- c. Would you like to receive a summary of the research undertaken?
- d. here is my card - please do get in touch if you think of anything else or want to ask us anything

Appendix H Prototype employability framework



The following pages show the various pages of the prototype framework.

In the framework itself, the shaped icons are active hyperlinks to supplementary material pages.



legend:

icon	links to...
	Explanation of how to use the prototype
	Closes the prototype
	Page of suggested skill development activities relevant to that profile
	Page of likely interview questions a student could expect to be asked and likely questions they could ask the interviewer
	Model of communication around student disability
	Back to prototype front (home) page

Transition Framework





Academic profile






- Subject/discipline
- Degree class
- Module contents & marks
- Technical expertise
- Linking technical knowledge to real world problems

Personality profile





- Introvert/extrovert
- Adaptability
- Attitude to advice
- Passion
- Can see big picture
- Work ethic
- Initiative
- Perseverance
- Confidence
- Problem solving
- Attention to detail

Disability profile



- Nature of disability
- Nature & level of support and adjustments received or required
- Reliance on support
- Expectations of the workplace

Employment activities profile



- Previous experience
 - ❖ Placement
 - ❖ Summer jobs
 - ❖ Frontrunner/internship
- Job-hunting courses attended
 - ❖ Letter/CV writing
 - ❖ Mock interviews
 - ❖ Self-appraisal
- Leadership activities
 - ❖ Year representative
 - ❖ Student union involvement
 - ❖ Club/society roles
- Soft skills development
 - ❖ Negotiating
 - ❖ Public speaking
 - ❖ Group work
 - ❖ Communication
- Professional society membership



Explanation – how to use this framework

- This framework collates information, links and suggested activities related to finding a job
- If you are a **student or graduate** looking for a job, you can use the framework to:
 - Find out about yourself, by following some of the links and suggestions in the different profile pages
 - Develop your own skills, by taking up some of the suggested activities
- If you are a **support professional** supporting someone looking for a job, you can use the framework to:
 - Initiate or illustrate a conversation about employment-related aspects of the individual
 - Give examples of activities that will help students or graduates to develop and enhance their own employment-related skills

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Academic profile - Skill development activities

- Academic skill development is part of teaching and learning on all taught modules
 - Take full part in all your coursework
 - Work through lecture notes and other teaching material
 - Practice the skill using examples given, or try it out on your own examples
- Other ways of developing your own skills include:
 - Self-study books, for example handbooks, Teach Yourself guides
 - Find a mentor who is a subject matter expert; this could be a family friend or a tutor

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Academic profile - Interview questions

- Employer to you:
 - What do you understand about user testing?
 - Have you ever had to design a database table?
- You to employer:
 - What database management system do you use?
 - Do you have a development methodology?
 - What training do you offer your staff?

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Personality profile - Skill development activities



- Personal skills can be developed in a variety of ways
 - On modules:
 - Group work
 - Doing a presentation
 - ClaSS sessions:
 - Planning and organising your work
 - Self-development:
 - Employability Skills by Hind and Moss (2011)
 - Self-development books from library, bookshops
 - Experiment: try a new approach and see what happens
- Useful links
 - Personality profile questionnaire <http://www.humanmetrics.com/cgi-win/JTypes2.asp>
 - Self awareness <http://targetjobs.co.uk/careers-report>
 - Career awareness http://prospects.ac.uk/information_technology_sector.htm
 - Career options <http://targetjobs.co.uk/career-sectors/it-and-technology>

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Personality profile - Interview questions



- Employer to you:
 - Tell me about a presentation you have given
 - How did you organise your work while studying?
- You to employer:
 - Would I have a mentor to guide me in the early days?
 - Do you help people develop their soft skills?

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Disability profile - Self development activities



- You can find out more about coping with things you find difficult using some of these websites and resources
 - NAS site <http://www.autism.org.uk>
 - Dyslexia advice
 - Dyscalculia advice
 - Dyspraxia advice
 - IOP report Supporting STEM students with dyslexia
 - Trailblazers report University Challenge 2013
 - Access to Work <https://www.gov.uk/access-to-work/overview>
- There is guidance on disclosure in some of these links
 - [links to files on disclosure advice]

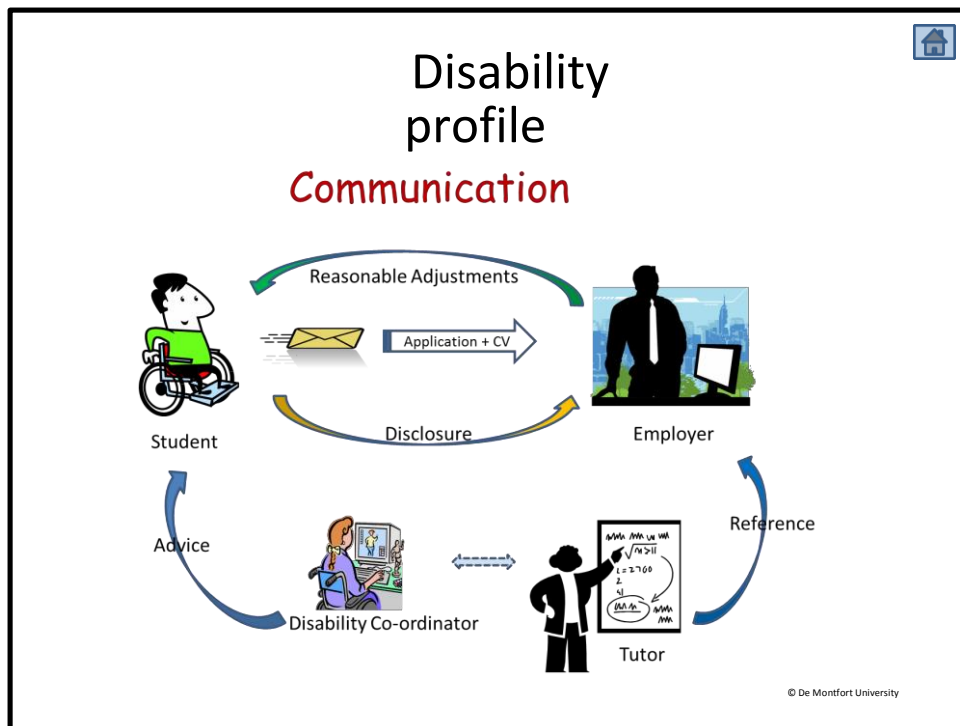
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Disability profile - Interview questions



- Employer to you:
 - Are there any ways we can make the workplace easier for you?
 - There is assistive technology available here, would you be interested in exploring how it could help you in your work?
- You to employer:
 - When I was at uni I found ... to be helpful, would that work here?
 - What kind of assistive technology do you provide?
 - I can't spell very well so I ask a teammate to check my spelling, will that be alright here too?
 - I'm good at seeing the overall picture, because to get round dyslexia I tend to bring unrelated things together (rather than 'there are things I'm not good at')
 - I have a strong focus on detail, because I concentrate hard on things to get them done right

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Employability profile - Skill development

- Activities beyond the curriculum often help you develop important skills
 - Can you think of any others you are doing?

Employability Activities



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Employability profile - Interview

- Employer to you:
 - Have you ever held a leadership position, for example team captain ? What did you learn from the experience?
 - What did you learn on your placement year?
- You to employer:
 - Do you encourage or sponsor professional body membership?

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Appendix I Framework pilot survey

Employability Framework – pilot survey

Thank you for helping to pilot our employability framework. Your views and suggestions will be treated anonymously. Your participation is voluntary, and you are free to decline or withdraw at any time.

Our research into employability is building a model that includes employability skills and activities, as well as interpersonal skills. The model is intended to help students understand and develop their employment-related skills, abilities and expectations. Your responses will help refine the model.

Please tick any of these responses that apply:

- ☐ I would like to use this tool to explore/improve my career-related awareness and skills
- ☐ the tool gives links and suggestions that are/seem useful
- ☐ my career awareness is higher now than it was before I used the tool
- ☐ my self-awareness is higher now than it was before I used the tool
- ☐ the tool is relevant to me now
- ☐ the tool might be relevant to me in the future
- ☐ I cannot see the relevance of this tool to my career development

Please complete the following statements:

1. This is what I like about the tool:

2. This is what could be different:

3. The tool could be called:

4. Here are some other comments: